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THE INVESTIGATION, DEVELOPMENT, AND DISSEMINATION OF PROCEDURES AND TECHNIQUES HELPFUL TO INTERINSTITUTIONAL USE OF TELEVISION AND RELATED MEDIA. FINAL REPORT.

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Committees were used to test the hypothesis that interinstitutional co-operation can facilitate more effective use of instructional media in higher education in the South. The principal areas of concern were (1) administrative arrangements for a regional cooperative program, (2) special problems of curriculum inherent in an interinstitutional program, and (3) procedures necessary for establishing high media standards and quality controls for an interinstitutional effort. The administrative study used interviews with university personnel as a basis for recommendations by a Southern Regional Education Board committee. Seven faculty committees worked on curriculum development, and a committee of academic and media experts worked on media standards. An evaluation panel concluded that cooperative regional programs should be established, that faculty committees can prepare a viable curriculum, and that maintenance of standards requires proper expectation, evaluation, revision, and use of aids. The panel recommended further national and regional study of standards of media utilization, alternate ways of financing, and decentralized versus centralized production. Appendices include full reports on curriculum development, specific problems, media standards, and the evaluation panel report. (JO)

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THE INVESTIGATION, DEVELOPMENT, AND DISSEMINATION OF PROCEDURES AND TECHNIQUES HELPFUL TO INTERINSTITUTIONAL USE OF TELEVISION AND RELATED MEDIA

Project No. 5-0267-64
Contract No. OE-5-16-020

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SUMMARY

Having found through a previous study that institutions of higher education in the South were interested in attempting cooperative planning and production of recorded instructional materials, SREB undertook this project to develop empirically procedures and techniques that would be needed. It was hypothesized that cooperation among institutions could facilitate more effective use of new media.

The principal areas of concern were (1) administrative arrangements for a regional cooperative program, (2) special problems of curriculum inherent in an interinstitutional program, and (3) procedures necessary to establish high media standards and quality control in an interinstitutional effort.

Committees were the major method used. Interinstitutional faculty committees worked on content for recorded courses in seven subject fields and produced pilot units. A committee of both academic and media specialists worked on standards. Administrative arrangements were recommended via interviews with key university personnel and further developed by a committee of SREB Board members. An evaluation panel assessed progress and results of the project as a whole.

Major conclusions reached were that a cooperative regional activity in media production for higher education is viable and needed; that interinstitutional faculty committees can successfully plan curriculum for media under appropriate conditions; and that standards assume a special importance in a regional effort. The report recommends further study of certain problems: the relative merits of decentralized and centralized production; standards for media utilization; and alternate ways of financing a regional program.

Appendices to the Final Report consist of detailed reports on the methods used and problems encountered in the curriculum planning done in this project, plus the reports submitted by the Media Standards Committee and the Evaluation Panel.

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INTRODUCTION

The feasibility of the interinstitutional development and use of recorded instructional materials had been studied thoroughly. As a process, the interinstitutional approach had been found to be desirable. This project began with this background finding and addressed itself to implementation of the interinstitutional process on a regional scale.

The project recognized the unresolved problems inherent in interinstitutional activity before uniform programming quality and maximum teaching effectiveness could be achieved. Recognition of the problems, however, did not negate the hypothesis upon which this study was based: that cooperation between institutions of higher education can facilitate more effective utilization of new media by: (1) stimulating maximum involvement of innovative faculty talent; (2) providing means and personnel able to develop new techniques; (3) developing superior instructional materials in quantity on a smaller pro rata cost basis per institution.

The hypothesis of the study established, this project then identified three basic problem areas that needed investigation before a regional program could be mounted in the interinstitutional development and use of instructional media:

A. The administrative requirements and procedures for operating such a program, including financing arrangements.

B. The curricular problems unique to the interinstitutional program, with emphasis on stimulating more imaginative approaches to using media.

C. The procedures necessary for establishing high media standards and quality controls.

I. METHOD

The character of the project substantially influenced the method of work. The committee and subcommittee process, reinforced by special studies, interviews and consultative expertise were the primary vehicles used to explore the modus operandi for interinstitutional, cooperative activity in using media. In all instances, committees (advisory or working under structured conditions) played a dominant procedural role. Obviously this was necessary if the investigation-by-demonstration technique were to produce any factual evidence.

Project activity in the three problem areas proceeded concurrently: the administrative, curricular development, and media standards studies.

A. Administrative

The Administrative Study began with the use of the interview technique, and consultation with knowledgeable individuals and groups. Identification of these persons was made possible by the experience of the Southern Regional Education Board as a regional public agency serving higher education. The scope of the study indicated the kinds of competency needed to obtain information on the questions asked:

1. What arrangements between institutions and/or states, including arrangements affecting faculty, are necessary to operate a regional program using television?

2. What formulae for prorating costs per institution/state are workable and appropriate?

3. What variables exist to facilitate or discourage interinstitutional use of television and related media on a continuing basis?

The persons interviewed during the administrative study included heads of state governments and other appropriate members of the executive branch, key legislators active in educational affairs, administrative heads of universities and colleges, and faculty who also served as administrators. Except in rare instances when the investigator was asked to present his questions to a group of faculty, the interviews were structured to be informal and candid: providing background data and general information rather than comments for direct quoting. This method was used so that a regional finding of commitment to using media interinstitutionally and interstate could be made as opposed to single institutional/state recommendations and opinions.

The survey interviewed state officials in the 15-state region served by SREB. In addition, twenty major universities in the South were systematically contacted, plus representatives of other institutions while meeting ad hoc on other project efforts.

The observations of all those contacted during the administrative study, reinforced by the project staff's knowledge of activities outside the region, were compiled and reported to a special and official[1] committee of the Board. This committee had been formed at the direction of the Board's Chairman and charged with the responsibility of establishing a continuing regional instructional television program service to be administered by SREB and supported by the member states. The findings of the administrative study were the basis for the committee's recommendation to the full Board at its annual meeting.

B. Curricular Development

The Study of Curricular Development and media applications on an interstitutional, interstate (regional) scale was performed through working faculty committees and sub-committees. Each committee was interinstitutional in composition. Its charge was to design instructional units that might be recorded and made available to multiple institutions. Each committee also was encouraged to use media as imaginatively as possible, and to supplement its own competencies with the frequent utilization of consultants who were specialists in content or in media. Finally, each faculty committee member functioned as an official representative of his institution appointed by the appropriate administrative authority (dean, department head, or at the action of the full department).

Seven such committees were organized: one each in architecture, communications, and psychiatry; two each in nursing education and teacher education. These disciplines had been identified in earlier SREB studies as being interested in the interinstitutional approach to media and as having a need for recorded material in their programs. As subject matter for a pilot study, they provided the heterogeneous quality that was needed. Forty-nine institutions were officially represented on the seven faculty committees.

The internal method of work within committees in designing content is described in Appendix I. The results of a committee's content planning were tested by producing experimental demonstration units. Involvement of committee members in the preparation and execution of these units served the added useful purpose of orientation to the use of media. In those instances where it seemed desirable and feasible to do so, special one- or two-day workshops were arranged at educational television installations equipped and staffed to conduct intensive training seminars for faculty. Most of the demonstration units were tried out on student groups to assess their teaching effectiveness.

The content planning committees and their sub-committees met as often as was practicable during the project period. Content planning continued between meetings on an individually assigned basis. Scheduling and administrative details were handled by the project staff; curricular approaches and development were the sole responsibility of the faculty committee members. Full committees usually assigned detailed content planning to smaller subcommittees whose work was subject to the review, approval or revision of the full committee. All institutions participating through the committee process had an equal voice in the work of the committee. When it was desired by the committee, and arrangements could be made with an institution by the project staff, a member of the committee would be freed of part of his normal work load so as to devote more time to the project. Similar arrangements were made with media specialists working with faculty committees.

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[1] A committee composed of SREB Board members, i.e., university and college presidents, legislators, and chaired by a governor of a member compact states.

C. Media Standards

The study of Media Standards began with staff awareness of the need to integrate the work of content specialists and media specialists, the need to stimulate more creative use of media, and the need to recognize and establish quality control procedures during the production phase. The continuing involvement of media specialists in content planning has been indicated in the above statements regarding curriculum development committees. Creative use of media was encouraged by project staff through its urging that institutions be selective in their choice of committee members, then in turn making appropriate consultants available, and exposing committees to both training seminars and actual production situations. Basic methods for establishing quality control procedures began with the acceptance of technical standards prescribed by National Educational Television and the National Association of Educational Broadcasting, and the acceptance of production procedures observed by major broadcast operations. Additional important studies of these problems were the assignment of a 10-member committee.

This special committee, selected by the project staff, was comprised equally of academic and media representatives. It was interdisciplinary in character, and academic participants were faculty persons experienced in using media for instructional purposes. Committee membership was deliberately not limited to institutions or organizations within the SREB region. The committee consciously avoided partisan or parochial comment.

The committee worked together as a group, as subcommittees, and as individuals. As a general function the committee addressed itself to the problem of making the most effective use of media in an interinstitutional and regional context. More specifically, in its first meeting it was asked to make recommendations that could be of immediate benefit to content planning committees then beginning work. Later, as a follow-up action, the committee was to observe the initial efforts of the content planning committees and thus to have one basis for judgment in making future recommendations.

D. Evaluation

An Evaluation Panel was appointed in accordance with the provision in the contract calling for such a group which would establish suggested criteria for proceduresrelated to the interinstitutional use of new media and set up rating scales or other evaluation devices. This panel was duly appointed early in the project period. It consisted of:

Robert C. Anderson, Vice President for Research, University of Georgia;

C. R. Carpenter, Research Professor, Pennsylvania State University;

Edwin G. Cohen, Executive Director, National Center for School and College Television;

Richard B. Hull, Director, Telecommunication Center, The Ohio State University;

John Meaney, Assistant to the Chancellor, The University of Texas.

The panel met four times, at each meeting receiving reports of progress from staff, consultants, or committee members. While recognizing that attempting a dual role might be somewhat precarious, the panel functioned in the earlier meetings as an advisory body, making suggestions regarding the conduct of the project. After the mid-point of the project, the panel assigned certain areas of responsibility to the individual members, with each one to make a final assessment of the aspect of the project assigned to him.

II. RESULTS

A. Administrative

The Administrative Study produced the evidence that institutions were receptive to the establishment of a regional program which would interinstitutionally and cooperatively develop, produce and make available videotaped and other recorded materials for instruction.

1. The program was represented as being needed by the majority of the institutions contacted.
2. The institutions agreed that such a program should be administered regionally.
3. Financial support of the program was viewed as a state function as opposed to a pro rata cost per institution, with additional support to be provided by federal and other appropriate sources.
4. While the program should be sensitive to the needs of the institutions, in general these needs were not unique with one institution; therefore the interinstitutional approach merited continuing effort.

B. Curriculum Development

The Study of Curricular Problems of a variety of disciplines in the interinstitutional use of media produced evidence by performance that a viable regional program can be mounted.

1. The interinstitutional content planning committees identified a common need for recorded materials.

2. Procedures for developing content through subcommittee and individual assignments were made workable.

3. The elusiveness of quality, and the complexities of using media effectively, found new recognition and acceptance. The need for expert assistance in the preparation of recorded materials was increasingly clear to committee members and they became the most severe critics of their demonstration instructional units.

4. Each content planning committee arrived at a plateau where continuing development and production of course materials were the committee's objectives.

5. Differences among disciplines emerged in the roles seen for recorded instructional materials, in methods of working on content, and in the arrangements it was possible to make for faculty members to work on content.

6. With one exception, each content planning committee drafted an outline for an instructional series to be recorded on videotape. Final reports of the committees are attached as Appendix II.

C. Media Standards

The Committee on Media Standards drafted a general guide to interinstitutional media undertakings. The report contains five major sections:

1. Preamble: the education problem, the media contribution, nature and value of interinstitutional approaches.

2. Experience with interinstitutional cooperation in media: TEMP, Oregon, EEN, CIC, SREB, and other.

3. Critical Junctures in the project development process (*i.e.*, factors affecting the probability of success): generating the will and means for cooperation; identifying needs and opportunities; defining precise objectives; prescribing elements in the teaching-learning system; identifying the measures necessary for maintaining consensus throughout the term of the project; agreeing on the process by which necessary changes are to be made; maintaining and strengthening the "will to use," supporting the system.

4. Guidelines for exchange of materials: proper expectations as to yield (goal-resource-output relationship); technical standards; production considerations (learner-oriented production design, the production team); evaluation, research, feedback; revision; utilization.

5. A look ahead: the future of interinstitutional use of media in higher education.

The full outline of the Media Standards report is attached as Appendix III.

D. Evaluation

In its final reports, the members of the Evaluation Panel wrote their assessments of the methods and findings of the project and made recommendations for carrying on a regional program of interinstitutional planning and production. Reports of the panel are attached as Appendix IV.

III. DISCUSSION

A. Administrative Study

Though this investigation of the interinstitutional-interstate development and use of recorded materials was geographically limited to a 15-state region, the implications and findings should be useful to other regions. One exception may be that part of the Administrative Study having to do with financing. Historically this 15-state region, through the offices of the Southern Regional Education Board, has supported interstate programs by state appropriation. The precedent was thus established for proposing a similar method of support, reinforced by federal and other assistance, for a regional instructional television program. The implication should not be drawn that a pattern of institutional financing merits no investigation. It could be more unwieldy to administer, but it would be directly responsible to the participating institutions, and their financial involvement might be beneficial: effort and dollars expended affect attitudes and acceptance.

The geography of the region investigated helps give the findings of the Administrative Study national significance. There is enough diversity within the region --- academically, institutionally, politically --- and such broad use of instructional-educational television facilities operating on open and closed circuit, singly and as parts of state networks, that reactions from administrators are not atypical of administrators anywhere. In this context the acceptance of the concept of cooperative interinstitutional media activity should be noted. Avoiding duplication by pooling academic and financial resources made good administrative sense.

The Administrative Study underlined again the critical problem of financing instructional television. The regional television program, first accepted in concept by institutions, then urged into implementation by these same institutions, still faces the same financial limitations familiar to all educational-instructional television operations. The regional, like the local or state operation, tends to be a line item on the budget outside the usual provisions for education. And if the regional program is to be supported at the expense of the intra-state television operation it clearly has little chance to begin, much less succeed.

The administrative mind tends to equate regional effort with production in quantity at a low per unit cost per institution or state. Quality achievement is assumed. This view sees the regional program producing core course recorded materials in volume in response to such administrative problems as those caused by increasing enrollment. The regional program can in fact respond to this need. But to delimit its performance to this response neglects one most important function: distinguished production beyond the capabilities of the single institution or state. This is the vacuum that challenges. It is one important requirement regional effort can meet: providing high quality core-of-the-course material not now available.

The Administrative Study disclosed general agreement that a continuing regional program required central, coordinated direction and administration. Ad hoc arrangements as needed were rejected in favor of a full-time, on-going operational mechanism.

B. Study of Curricular Development

The Study of Curricular Problems in the interinstitutional use of media destroyed --- by performance --- the myth that interinstitutional faculty committees will not work cooperatively. Common needs were identified, procedures for developing recording materials were put into practice, delegation of authority was made as required, individuals and subcommittees functioned as assigned, and full committees remained operative and effective during certain membership changes.

The productivity of the interinstitutional faculty content planning committee grew out of its empathy with the project's objectives. This was enhanced by identification of common goals, mutual professional respect, adequate central coordination and realistic working provisions and conditions. Given these ingredients in reasonable supply, it seems realistic to include that interinstitutional planning and production of recorded materials can be successful.

The collective performance record of the committee must be affected by the individual competencies of its membership. This is true especially in a task which is dependent on cooperative effort. Content planning committees are engaged in highly creative work; innovative persons are essential if the results are to be exciting. To rebut this may be to say that this is why you use consultants. This can be one contribution of the consultant, but to delegate all innovative responsibility is to destroy the raison d' etre of the interinstitutional committee. This project developed no formula for pre-selecting innovative faculty talent before they are assigned to committees. The regional scope of the project limits acquaintance with faculty in all disciplines. Also, committee membership selection is an institutional function. The project would only emphasize to institutions the importance of careful selection of its representative on an interinstitutional curriculum development committee. The ongoing regional operation also must concern itself with this problem. It would be dangerous to conclude that because interinstitutional faculty committees performed effectively under research project conditions, this calibre of performance is automatic in a large and continuing operation.

Establishing and adhering to realistic working schedules and deadlines is essential for all content planning committees. Aside from the fact that a workable schedule is a sound administrative procedure, the committee's creative effort suffers if its momentum is lost through irregular, infrequent, or interrupted working sessions. Best performance at a reasonable investment of time, effort and money could be achieved by allowing committees to work full time at their tasks until the target date for completion.

Differences between disciplines produce several consequences in this kind of cooperative effort. If the instructional needs are different, the role of media and therefore the type of recorded production will differ. Some fields of study need and want essentially complete recorded courses. Others have greater need for open-ended materials that will challenge discussion, or for illustrative materials that will give a real-life dimension to theoretical subjects. Such divergences produce variations in methods of work. The project learned these things pragmatically. In a continuing program, preliminary exploration to gauge these factors before going into a field of study would yield a more efficient work plan.

C. Media Standards

The report of the Media Standards Committee, probably the only document of its kind, would readily lend itself with a little expansion to publication. In an available form it could serve a much-needed function as regional and interinstitutional efforts in television and other media multiply in the years ahead --- as they seem bound to do. The question of standards looms suddenly as much more important when producers of instructional materials face the prospect of more-than-local consumption, or when an educational institution considers using "somebody else's course."

Useful as they might be, however, such guidelines will not serve alone to insure high standards of media production. If the Carnegie Commission was correct in saying that ". . .Nothing which approached the true potential of instructional television has been realized in practice," one major reason for this state of affairs surely has been ITV's failure to sustain a high level of quality in its attempts to stop-gap the growing need for quantity.

Quality in an instructional production depends equally on the quality of the minds that planned the content, the quality of the staff and equipment that recorded it, and the quality of the effort to utilize it appropriately. This is not a new idea, of course; it had been said many times before this project was undertaken. Its validity has been reaffirmed by the experience of the project.

In cooperative planning by an interinstitutional faculty committee, quality will not necessarily be only as good as the weakest member, but patience and wisdom are often required to avoid a "least common denominator" approach. This observation underlines again the importance of further study and trial to arrive at good procedures for committee selection. Once appointed, the committee members must be given enough time for discussion and thinking as a group, and enough opportunity to explore the medium for which they are to prepare content. Creativity will not emerge until these processes are well under way. While evaluation with students was not done on all the pilot productions in this project, enough was completed to suggest strongly that, as intellectual group process and media orientation matures, quality of content will rise and can in fact be high in interinstitutional media enterprises.

Decentralized regional production poses its own dangers to the attempt to maintain media standards at a desired level. The project found (perhaps not surprisingly) that not all ITV production personnel mean the same thing by high production standards, and that there is often a gap between standards and actual performance. Over the long run, the increase of regional approaches to ITV may well tend of itself to raise the standard of production quality, by introducing a competitive element not present when productions are seen only locally. Until this happens, however, it will be most necessary for any regional production effort to promulgate and supervise media standards for production.

The fact that the project has not dealt directly with utilization calls attention to the urgency of doing so. Procedures necessary to wise utilization of recorded instructional materials have been largely neglected at the level of higher education. Excellence of cooperatively planned materials could easily be negated by their being used in ways and in circumstances the planners and producers never intended. It would seem timely for institutions and media organizations to work on this problem.

D. Evaluation

The fact that the Evaluation Panel worked partly as an advisory body was helpful to the project in several ways. Panel members were persons of rich experience and national reputation in new media and higher education, and thus brought a great deal to their discussions with staff and committee members. Experience with the panel strongly suggests the desirability of having a similar advisory group for any on-going regional effort in media planning and production.

It should be noted that the primary assignment of the panel --- i.e., evaluation --- was a difficult undertaking in a project of this kind. There were no concrete accomplishments, such as a recorded course, for them to assess. Their concerns therefore were necessarily limited to the methods the project employed to get planning done.

IV. CONCLUSIONS

A. Administrative Study

1. Many administrators of higher education accept the concept of cooperative, interinstitutional media activity on a regional basis.

2. Financing instructional television remains an increasingly critical problem in higher education.

3. An on-going regional program in new media will have to stay alert to protect quality in the face of administrative pressures to produce quantity.

4. A continuing regional program would require central, coordinated direction and administration.

B. Study of Curricular Problems

1. When interinstitutional faculty committees work cooperatively on a common instructional problem, the end-product is the stronger for having had the knowledge of several minds brought to bear on it.

2. Quality of faculty personnel is critical to the outcome of such an effort.

3. Committee procedures must allow enough time and intercommunication to generate and sustain momentum.

4. Differences among disciplines must be taken into account in proposing use of media and in designing working procedures for planning. (Varying roles of media within disciplines are equally important. The project did not have opportunity to investigate them.)

C. Media Standards

1. Standards assume special importance in interinstitutional use of media.

2. Media standards of high quality begin with a content planning committee of high quality.

3. Promulgation and supervision of media standards is essential in decentralized regional production.

4. Standards of media utilization urgently require further study and attention, especially in higher education.

V. RECOMMENDATIONS

1. That continuing regional programs of planning, production and use of new media be established for higher education. Experience in this project supports the hypothesis that regional cooperation in instructional media is both feasible and desirable as a needed supplement to local efforts.

2. That further study be devoted nationally and regionally to the following issues inherent in regional programs in media:

a. The possibility that a decentralized planning and production system would be less effective than a central physical facility where planning, production, training, and research would come together and strengthen each other.

b. The urgency of examining and establishing standards of media utilization in higher education.

c. Ways in which such regional programs can be financed. Where possible, additional investigation should take the form of trial demonstrations of alternative methods of financing.

APPENDICES

APPENDIX I

CURRICULUM DEVELOPMENT:
SUMMARY OF PROCEDURES

Among the problems the Project proposed to investigate were:

- -- Administrative arrangements (including those affecting faculty) necessary to interinstitutional use of television,
- -- Procedural consequences following from differences in types of problems presented by disciplines or content areas,
- -- Procedures and conditions for stimulating unusual and imaginative approaches to curriculum construction,
- -- Procedures for adapting the interinstitutional use of television to needs of instruction within the disciplines,
- -- How faculty arrangements are affected by necessary differences among disciplines in required procedures for interinstitutional planning and use of new media.

The vehicle the project used to explore those particular problems was the interinstitutional faculty committee charged with designing an instructional series to be videotaped and made available to multiple institutions. Seven such committees were organized: one each in architecture, communications, and psychiatry; two each in nursing and teacher education.

These committees met every three or four months, usually for one-day to two-day sessions. Most of them assigned work to be done individually or by subcommittees between meetings. Each committee was given the opportunity to produce one or more pilot lessons to gain insight into the requirements of the television and film media and to experience translating content into visual terms. Each committee was to draft an outline of a course (or part of a course) with recommendations for its visual treatment.

Selection of Specific Subject Matter and Committee Members

The general fields (architecture, communications, nursing, teacher education, psychiatry) and specific curriculum areas (Social Foundations of Education, Psychopathology, etc.) were identified under the 1963-65 "Feasibility Study". In every case specific subjects within a discipline were selected by asking heads of programs to suggest what parts of their curricula might be most assisted by the use of television. The approach to posing this question varied. In psychiatry, teacher education, and nursing, SREB sponsored region-wide conferences to explore instructional uses of television and other media in each discipline. Conference recommendations were studied afterward by steering committees of program heads, who identified specific subjects at that time. In architecture and communications, SREB went directly to heads of programs for consultation on subject matter choice, without the preliminary conference process.

In the latter two fields the program heads themselves constituted the content planning committees. The institutions in the architecture project were the accredited schools of architecture in a three-state subregion. (One of the things the "Feasibility Study" set out to assess was the importance of geographical proximity in interinstitutional efforts of this kind.) In communications the three universities in the region having fully developed major programs in the field were approached.

With the other disciplines the staff wrote to deans or department heads inviting nominations, and stressing that committee members should be qualified content specialists rather than persons with audiovisual or television training or experience.

Committee Composition, Organization, and Methods

The makeup and methods of each committee are detailed in the individual committee reports in Appendix II. Only one group, architecture, finished in 1967 with all the same members who had originally been appointed. In the others there was some attrition, chiefly due to inability to attend meetings, and there were a few additions. Additions and substitutions were not made according to any agreed-upon rule, but rather were "played by ear" with the wishes of the committee having a good deal of influence. The staff did not urge adding new members at any time, lest the group dynamics process receive a setback. A major nucleus of the same committee members served in each group throughout.

Project staff played a coordinating role, arranging and reporting meetings, usually planning agenda, negotiating with production personnel, assembling and distributing material, etc. The several committees varied as to methods and organizational procedures within the group. In three there were no chairmen; in two, a temporary chairman was appointed by staff at the first meeting and became permanent; the remaining two elected their chairmen.

Staff told the committees at the outset that they could devise their own methods of working on content. Early meetings were devoted to defining the general scope of the content and guidelines for its further development, and to suggesting future procedures. In most cases, the original outlines and guidelines were extensively revised in the final year.

In proposing this project, staff had anticipated that each committee would delegate the bulk of the work of content planning to a subcommittee whose reports would then be submitted to the committee of the whole for reaction, discussion, and revision. However, in general this was not done. The committees preferred to divide up the work among several subcommittees, usually consisting of one or two persons each, then bring the parts together.

It had also been anticipated originally that most content planning would be done in two- or three-week blocks of time. The timing of the project contract made this unfeasible, however, since funds did not become available until fall and it was undesirable to wait until the following summer to begin work. Consequently, most groups held two-day meetings two or more times during the academic year.

While the actual production of pilot tapes or films was not specified in the original proposal, it became apparent that content planning could not be done intelligently unless the groups had some experience in translating their subjects into a visual medium.* It was therefore decided after the project began that each committee should produce a pilot unit. The four committees with the least previous experience with instructional television --- the two in nursing and the two in teacher education --- each produced two pilots. In every case the second pilot was a decided improvement over the first. In general, the improvement was in the direction of simplicity, in terms of both production techniques and amount of content.

Some orientation to television as an instructional medium was given to all committees (with the exception of the Communications committee, where it was not needed). This was done as opportunity and/or need arose, and varied greatly from one group to another. Committees that received the least orientation to television commented at the end of the project that they would have benefitted by having more. Others noted that for maximum effectiveness and usefulness in content planning, the orientation should have come at the same time as production planning for the first pilot, and that both should have occurred earlier in the project.

In teacher education and nursing the pilot productions were evaluated for effectiveness with student groups. Results indicated that the first productions were adequate in that students could learn from them, but were not very strong in motivating students to learn more about the subject or in generating student discussion about the issues involved. At the time this report is being written evaluation of the second round of pilots is incomplete. Results so far suggest that the planning committees are justified in their subjective assumptions that the later productions are better in instructional quality.

Conclusions and Recommendations of Staff

1. Administrative arrangements affecting faculty (selection, working conditions).

The project did not yield firm conclusions on the best approach to selecting a good, productive, creative committee of faculty personnel from several institutions (five to ten) who will get the job done with the least spinning of wheels. Nomination by dean or department head is desirable for two reasons: it gives the individual some recognition at home of official status on the committee and it gives the committee some official status at the institution. It does not give personal involvement on the part of the individual; indeed in the case of some people it may even retard this. A possible solution would be to solicit recommendations from program heads in at least twice as many institutions as one eventually wanted members on a committee; then use a variety of means to obtain considerably more information about each one (experience, interest, etc.) before making final selections. Of course, one would have to make clear in the original request for nominations that not all persons nominated would be appointed.

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*Since the members of the Communications committee were professionals in television, experience with the medium was not a factor, of course. Producing a pilot gave them an opportunity to try out some innovative ways of presenting abstract ideas in the medium.

It is difficult, if not impossible, for one coordinator to handle more than two such committees and still keep plans and communications moving ahead rapidly and smoothly. A better arrangement might be for the regional office to decentralize coordination of faculty planning committees. A faculty member could be employed on a half-time basis for each committee and operate most of its concerns from his home base, sending the regional office enough information to keep it informed of progress and referring problems to the regional staff.

As to working conditions, those employed in the project were probably not the best. For any given committee, either the interval between meetings was too long for continuity, or, if meetings were more frequent, they required too many trips away from the campus. A workable plan might use longer meetings (three to five days) for the group as a whole, with still longer (three to four weeks) intensive working sessions between by a subcommittee selected by the whole group.

2. Stimulating unusual and imaginative approaches to curriculum construction.

The first round of pilots in nursing and teacher education certainly reaffirmed the old adage, "You have to walk before you can run". At the time the project was drawing to a close, these four groups were just getting to the stage where they could be creative in planning instruction for television. (This varied somewhat from group to group.)

If future regional planning committees consist as these did of persons largely neophytes in the use of television for instruction, a well-planned program in orientation to television, given early and reinforced as the planning went along, might be very effective. Groups of individuals who were experienced in instructional television could profit by the opportunity to explore new and interesting things in ITV being done elsewhere.

3. Differences among disciplines.

Several of the questions the project originally proposed to investigate concern the possible consequences of differences between the several disciplines. Of the variations that occurred in the ways the committees chose to work, it is admittedly not always possible to differentiate those due to differences in the disciplines themselves and those due to individual differences in members. However, a few generalizations should be made for further investigation:

(1) Role of recorded instructional material.

The psychiatrists had little use for prefabricated, recorded compositions, however well done. Their need was rather for a wide variety of illustrative materials, edited only to the extent of being highly selected. In teacher education the need expressed by both committees was for material that would bring to life abstractions and principles, that would highlight issues and problems rather than give pat answers or show "right" methods. Both teacher education committees envisioned using their projected series as springboards for discussion rather than means of presenting facts or conclusions. In nursing, where the shortage of qualified faculty is far more severe than in any of the other fields concerned in the project, the two proposed series are far more extensive (thirty as opposed to ten or twelve videotapes) and are designed to constitute the basic core of the course, although both committees felt strongly that supplementary classroom work should be done.

(2) Method of work.

The differences in roles for televised instruction also produce differences in methods of work. A series of the scope projected by the nursing committees requires a great deal more research and organization than the others. The types of series projected by the teacher education groups, on the other hand, call for more free-wheeling discussion and imagination in planning. Another aspect of disciplinary differences affecting methods of work consists in the "facts of life" of the profession itself. Psychiatrists teaching in medical schools normally carry a load of private practice in addition. Their schedules are very tight and when they go on vacation in the summer they do not want to "moonlight" on other assignments. It would be very difficult to get a group of these people together for an extended period of time. Nursing faculty, on the other hand, do not usually teach summer school and often take private duty nursing or some other special job in the summer. They could be convened for extended periods at that time if they knew far enough in advance. Teacher education faculty, especially if they teach at the graduate level, are even more involved in the summer than they are in the regular session.

(3) Adapting television to the needs of instruction.

The materials planned by the psychiatry committee are adaptable in the extreme. The committee believed that nothing would be gained by preparing anything more than excellent illustrative case materials for the classroom teacher. At the other end of the spectrum is the mental health concepts series for two-year nursing programs. The schools for which this series is designed are multiplying rapidly and only a small handful of people are qualified to teach this subject in these programs. Interinstitutional planning for televised instruction must take account of such factors as these and plan for television accordingly. There would apparently be no use in preparing a "canned" course complete with lectures and reading materials for professors of psychiatry. Neither would there be anything gained by preparing a selected group of case materials on mental health for a constituency of teachers in two-year nursing programs who would not be prepared with any frame of reference in which to put them.

The staff believes that the findings of the current project have at least provided a basis for constructing a viable regional program in interinstitutionally planned instructional television. To be sure, procedures of duplication and distribution have not been explored in this effort. However, the national picture is changing so rapidly in these aspects of new media that by the time a regional program staff takes over, the requirements and possibilities in distribution and duplication may be quite different than they now are. Problems associated with decentralized production have been sampled if not fully explored. The staff conclusion, judging by the pilot productions in this project, is that it would be highly desirable for a continuing program to provide a means of exercising close supervision and control over production. "Do's" and "don'ts" associated with content planning ought to be pretty clear from the experience with this project.

It is the staff's conviction that regional production for instruction is inevitable sooner or later. It is hoped that what has been done under this project will assist future regional operations in designing a viable prototype.

APPENDIX II-A

ARCHITECTURE

Selection of Field and Pre-Project Activities

In 1961-63 SREB received funds from the Ford Foundation for the improvement and encouragement of educational television in the South. One type of activity made possible by this grant was the holding of meetings with persons interested or involved in instructional television in sub-regional clusters of states. One such group consisted of ETV people from the universities of Houston, Texas, Oklahoma and Arkansas. By the late fall of 1962 this group had discussed quite seriously the possibility of cooperatively producing instructional materials for televising. Accordingly, the group approached the central administrations of the four universities. The idea of a cooperative production was received with enthusiasm and administrative backing for the effort was assured. After considerable discussion of alternatives, the informal planning group agreed to explore the possible interest of the accredited schools of architecture in the three states. The field of Architecture seemed promising because of its heavy reliance on visual means of communication and because it was a field in which little or nothing had as yet been done with televised instruction. A spokesman for the planning group approached Dean Philip Creer of the School of Architecture of the University of Texas. Dean Creer was very much in favor of the proposal and assisted in enlisting the interest of the other architecture deans. Matters stood at about this point when the Feasibility Study got under way.

Organization of Content Planning Committee

The original planning committee consisted of the seven architecture deans and one faculty member brought by each. After the first meeting Rice University was approached about its possible interest in the project and representation from this institution was added. Thereafter the committee consisted of: Mr. Howard Barnstone, Architect, Houston, Texas; Mr. Nolan E. Barrick, Head, Department of Architecture and Allied Arts, Texas Technological College; Mr. Philip D. Creer, Director, School of Architecture, University of Texas; Mr. James C. Morehead, Jr., School of Architecture, Rice University; Mr. Edward J. Romieniec, Chairman, School of Architecture, Texas A & M University; Mr. F. Cuthbert Salmon, Head, School of Architecture, Oklahoma State University; Mr. John G. Williams, Director, School of Architecture, University of Arkansas; Mr. John G. York, Director, School of Architecture, University of Oklahoma; Mr. Duff Browne, Southern Regional Education Board (Coordinator).

Selection of Topics and Treatment

The committee decided to plan the production of films, videotapes and slides which, along with printed materials and class discussions, would constitute the major portion of a three-credit semester course on "great architectural spaces, covering the entire span of history and world-wide geography". They selected 24 of the world's architectural spaces as those most important for the student of architecture to analyze. A week of instructional time was proposed for each one. According to the plan, the first class meeting of the week would consist chiefly of a color film approximately 40 minutes in length. The second would be a videotaped panel discussion by national and international authorities from related fields (history, sociology, economics, etc.) pointing out how the building reflected the society which produced it and how it in turn affected that society. The third class meeting would be a discussion or lecture led by the regular classroom instructor using color slides if he wished to do so.

It was the endeavor of all to avoid a rigid sequence in order that ultimate flexibility might be enjoyed by any given institution or transmitting source. Each film would be so designed that it would be a complete entity for either educational or independent television programming, with or without the videotaped unit.

Methods of Work

As Phase One of the project, each of the eight institutions took one of the architectural examples as its responsibility for content planning, and prepared a general outline of the material to be covered. It was then decided to select one example from the 24 and develop it as a pilot unit. Thomas Jefferson's Academical Village at the University of Virginia was chosen. Planning the film, videotape, and slides for this architectural example was the responsibility of the University of Texas.

As the architecture committee's color film on Thomas Jefferson's Academical Village was produced under the "Feasibility Study" the circumstances of its production will not be detailed here. Under the present project a videotaped panel discussion of "Thomas Jefferson - The Man and His Works" was produced. The committee advised that the panel discussion be forty minutes in length. When they viewed the finished product they agreed that forth minutes was too long for this type of program.

Concurrently, preliminary work was done looking toward a color film on the next architectural example selected, the Seagram Building in New York. This was the responsibility of the University of Houston. Interviews with the architect and others who had had a hand in shaping the building were recorded on audiotape for use on the film and a rough script was sketched out.

Further Planning

Members of the content planning committee were well aware that the entire series as they envisaged it was a very ambitious one, with each unit requiring a color film, a videotape, and a set of slides, and with the majority of the 24 great architectural spaces located outside the United States. At the same time, the excellence of the pilot film on "Thomas Jefferson's Academical Village" underlined the desirability of having recorded materials of this calibre for their teaching programs. They therefore determined on two simultaneous courses of action --- to broaden the base of institutional participation, and to seek support for each of the 24 units independently.

The pilot color film was shown at the annual meeting of the American Institute of Architects, where it elicited a good deal of interest. Subsequently each of the schools represented on the committee bought a print of the film. Committee members divided among themselves the other accredited schools of architecture in the region for purposes of visiting them, showing the film, explaining the project, and extending an invitation to participate in the remaining project work. Response was generally very favorable.

A subcommittee on financing began explorations for support to produce the units on the Seagram Building and on Falling Water in Arkansas. At the time of writing this report it is still too early to ascertain the sucess of these attempts and the future of the architecture project as a whole.

APPENDIX II-B

COMMUNICATIONS

Part 1: Planning Procedures
(Report of Project Staff)

Pre-Project Activities

Communication is a field of growing importance in university study in the present age of rapid development and change in media of mass communication. It is a field in which there are not enough well-developed curricula in the Southern region. In 1964-65 it had made no notable use of television as a medium of instruction. For these reasons it seemed that the field of communication might be a promising one for cooperative interinstitutional planning. Under the "Feasibility Study" this idea had been submitted for reaction to the persons responsible for instruction in communication at the three universities in the South offering majors in this subject (the Universities of Florida, North Carolina, and Texas). These people were enthusiastic about the possibilities.

Committee Organization and Methods

In the summer of 1965 a content planning committee was organized consisting of the following heads of instruction in communication:

Dr. Kenneth A. Christiansen, University of Florida,
Dr. Stanley Donner, University of Texas,
Dr. Wesley Wallace, University of North Carolina.

As the committee was small and the members knew each other quite well, no chairman was formally designated. Both Duff Browne and Mary Howard Smith worked in a staff capacity with this committee.

After discussing instructional needs and possibilities in the field, the committee concluded that a basic course in mass communications would be extremely useful. Mr. Donley Feddersen, then at the University of Florida, was invited to meet with the committee to get their general ideas on emphasis and scope of content. He was then employed as consultant to work out a course outline. This he completed before leaving the region to go to Indiana University.

In discussing Mr. Feddersen's outline the committee recommended that the topics "Media Criticism" and "Media Effects" be combined into one block of instruction to consist of three half-hour units. Each member of the committee prepared a position paper on the points to be covered, possible modes of presentation, and bibliographical references. One member then took these papers to compile them into one document for further committee review.

However, the content planning committee, in discussing the compilation, had difficulty in arriving at a common delineation of the subject. As an alternative, Dr. Donner drafted a rough outline for a program which would introduce the series, and the committee decided to substitute this for the subject previously chosen. Dr. Donner worked on a script with a producer and a writer at the University of Texas studios; then a meeting was held with the committee, producer, script writer, and project staff to discuss production plans.

"The Process of Communication," produced at the University of Texas, has been shown to a variety of groups, though it has not been formally evaluated with students. Professional ETV personnel who have seen it have praised its production quality and its imaginative approach to content.

After the completion of the Pilot, the committee revised the outline, working on it both individually and together. Dr. Christiansen compiled a bibliography and Dr. Wallace drafted an instructors' guide. Dr. Donner on behalf of the committee wrote a statement about the proposed course which follows as Part 2 of this report.

Part 2: "Man and Mass Communications"
(Report of the Committee)

1. The Scope of the Series and Its Objectives.

The idea for this series of taped television programs on communication emerged from the realization that among the several states united in forming the Southern Regional Education Compact many of the colleges and universities had neither the resources of staff nor the equipment to offer an effective first course in Mass Communication. Even so, in almost every college, matter growing out of the important study of communication was being offered in departments of journalism, English, radio and television, speech, sociology and political science. There was clearly a need for a beginning course which would form the base for the various more specialized studies of communication.

It was not long before the planning committee for "Man and Mass Communication" found that the other universities within the region which had already established course structures in mass communication also wanted such a series. These schools, which were already involved in more sophisticated studies of communication, were even more sharply aware than the others of the value of a carefully prepared, exciting television series on Mass Communications. This discovery led the planning committee to direct letters to universities throughout the country which were engaged in teaching communication to learn of the degree of their interest in the proposed television series. The response from these letters clearly showed that the interest in such a course existed not in the South alone, but in the East, the Mid-West and in the Far West.

The objective of the series "Man and Mass Communication" is to provide the structure of a first course in communication. The level to which it is directed is that of upper division undergraduates (juniors or seniors). It has subsequently become apparent that the course could also be offered to lower division students or to graduate students by altering drastically the ways in which advance preparation for the programs was handled for freshman and sophomores and by the studies in depth of the program ideas by the graduate students. The possibility of such a wide range of use of the series "Man and Mass Communication" stems directly from the purpose of the series.

The purpose of the ten programs is to present to students on a college level vital ideas about mass communications, to awaken interest in further study by the students, and to provide a base for further lectures and discussions by the instructor. Therefore, it is not the intent of the series or any program in it to be complete in itself. It is not a total instructional device. Rather than to replace the teacher it is designed to make optimum use of him. The programs are a beginning, a frame and a structure which would provide a point of departure for students and the teacher to examine in greater detail the most relevant questions raised.

Because of the design of this series, the usual attempt to measure programs by the amount of information gained by the students would miss the controlling purpose. While it is true that information will be learned by the viewing students, the important information gain and attitude change will accrue from the more complete development of the ideas in class. It is because of this different approach that the series can be used by students of almost any level from first students in communication to graduates. Clearly the graduate students would make different use of the ideas presented through more careful investigation, developing relevant research and following up tangential lines of inquiry.

II. The Content of the Series

The content of the series is divided into ten programs of one-half hour each. A college or university operating on a fourteen-week semester could show one program each week for ten weeks with ample time for presenting preliminary and additional material as well as for review and for examinations. Schools on the quarter system could still use the programs one each week, but the discussions and follow-up assignments would necessarily be more concentrated. The assumption has been made that a class in communication would meet for an hour three times a week. The level of the students would dictate which day the television program would be shown and what amount of pre-preparation and subsequent development and amplification of the ideas would be valuable. Since each program is one-half hour there would be some pre and post discussion on the day the program was shown.

The content of the series embraces the process, functions, characteristics and audiences of the mass media. From the description of the institutions of the media the series moves to criticism, culture and the effects of the media. The final sections deal with public policy and a look into the future. In short, the series presents an overview of the essentials of mass communication.

The production emphasis of the series follows the purpose of the series. Since the purpose is to spark the imagination by presenting ideas which will later be more fully developed by the instructor in class, each program will be highly visual. The general form of the pilot program will be followed with no teacher or host appearing on the screen. Visual forms, diagrams, pictures, vignettes and models all appear in a logical, psychological or chronological order as is most appropriate and are woven together by an off-screen narrator. The university or college teacher is not competing with an "authority" shown on the screen. The instructor is given the opportunity to make whatever use he wishes of ordered ideas dealing with the subject matter of man and mass communications.

APPENDIX II-C

NURSING

Part 1--Background:

Selection of Field and Pre-Project Activities

In 1962, with a grant from the Kellogg Foundation, the Southern Regional Education Board initiated a five-year project to improve collegiate nursing education in the Region. The work of the project is carried on by a council consisting of the deans or directors of the four-year and two-year collegiate nursing programs in the South. Although in 1962 nursing education had as yet done very little with television, the SREB Nursing Council saw television as one significant possibility for the improvement of instruction. The Council set up a committee on television and new media, charged with exploring on-going and potential uses and making recommendations to the Council as a whole.

Because of this interest on the part of so large a segment of higher education, nursing education was specified in SREB's "Feasibility Study" as one of the fields to be explored. A regional conference on the uses of television in nursing education was held in Houston, Texas, in the summer of 1964 as a part of that project, using as a planning and steering committee for the conference the new media committee of the SREB Nursing Project.

Approximately 70 deans of nursing education programs attended the conference. The level of interest was extremely high. In small discussion groups the conference participants suggested curricular areas where television might be most productively used and recommended that institutions cooperate to plan and produce instructional materials for nursing in the Region.

Subsequently, the SREB ETV Project staff reconvened 26 of the nursing deans who had participated in the conference. After a general discussion of the needs of nursing education and the possibilities of television for instruction, the group divided into a committee on baccalaureate programs and a committee on two-year programs, each to recommend a curricular area for cooperative planning and production. The baccalaureate group recommended a series on Public Health Science. This is a subject generally required of four-year nursing candidates, a field in which well prepared nursing faculty are extremely scarce, and one in which most schools of nursing rely heavily on outside resource personnel from county health departments, schools of public health, etc. The junior college group recommended a series on Mental Health Concepts for the general nurse (as differentiated from a series on Mental Health for Psychiatric Nursing).

The project staff wrote all deans involved in the meeting at which these subjects were selected, inviting each to appoint a member of her faculty to the appropriate content planning committee. Nine baccalaureate deans sent in nominations. Those who did not nominate anyone explained either that they did not have a faculty member sufficiently qualified in public health or that they were so understaffed in this area that faculty could not be spared to attend meetings. Among the two-year programs, only three had faculty members they felt were qualified in mental health, and all three were from junior colleges in Florida. The project staff wished to get a wider geographical representation and a slightly larger committee. (It should be noted that of the 55 two-year nursing programs then in the region, by far the majority were very new and still understaffed. Very few had faculty prepared in mental health. Very few could spare what faculty members they did have in any field to be away for two-day meetings at frequent intervals.) After consultation with the SREB Nursing Project Director and with several directors of two-year programs in the region, the ETV Project staff added one committee member and one consultant to the roster.

The two committees were appointed and organized to begin work under the Cooperative ETV Project in the summer of 1965. Since then each group has held nine or ten meetings, with individual or subcommittee work carried on between meetings; each has completed a fairly detailed course outline; and each has produced pilot videotaped lessons.

Part 2--Public Health Science

The content planning committee for Public Health Science first met in July, 1965, and held its final meeting in July, 1967. Its charge was to recommend content for a videotaped course in Public Health Science for baccalaureate degree nursing programs. The committee found that to accomplish this, three major tasks had to be undertaken: (1) defining more precisely the goals, level, limits, and role of such a course; (2) exploring television as a medium of instruction with specific application to Public Health material; and (3) determining detailed content for the course.

Although the three tasks were approached more or less in that order, inevitably all three were operative to a degree at any given time, and considerations arising in one task would alter perceptions of the other two. Committee organization and methods of work likewise reflected such modifications.

Composition and Organization of Committee

The original committee consisted of the following individuals:

Miss Margaret Brown, University of North Carolina
Miss Janet Campbell, Duke University
Miss Edna DeBruler, Medical College of Georgia
Dr. Mary Louise Paynich, University of South Carolina
Mrs. June Remillet, University of Florida
Miss Loretta Roberts, Emory University
Miss Margaret Todt, University of Kentucky
Mrs. Helen Wiesmann, Medical College of Virginia
Miss Edith Wright, Texas Woman's University
Dr. Mary Howard Smith, Southern Regional Education Board(Coordinator)

All nine institutional representatives were members of the public health nursing faculty. Each was well qualified in public health by both education and experience, though there was much variation in specific background, educational indoctrination, and philosophy.

The membership of the group remained constant through the first year. Miss Todt died in August, 1966. Her loss was deeply felt, but no replacement was appointed. Two members changed positions in the second year, so that, strictly speaking, they no longer represented the schools of nursing which had appointed them. By this time, however, group process had advanced to a point that all were reluctant to make changes in personnel.

The group organized itself in the first meeting into subcommittees each responsible for a specific area of content. In general these assigments remained fixed throughout the project, though there was some temporary shifting about from time to time for various reasons. Ad hoc committees were formed as needed for special tasks related to production of pilot programs. Dr. Smith coordinated committee activities throughout and chaired the first three meetings. After the third session two members expressed a concern that the group was not as self-propelling as it ought to be by that time. Consequently, in the fourth meeting it was proposed that the committee elect its own chairman. Mrs. Remillet was elected chairman and Miss Roberts co-chairman.

Defining the Course

In its initial meeting the committee agreed on five broad areas of content that would constitute a basic course in Public Health Science designed principally for upper division nursing students. The five areas, representing the major divisions of course content, were Biostatistics, Epidemiology, History and Trends, Environmental Health Problems, and Community Organization. Tentative guidelines were sketched in to point directions for developing detailed content under each heading.

A second meeting, with a consultant present for each of the five content areas, made little progress. It became apparent that the committee needed to define the course and its emphases more explicitly before consultants could be helpful in its development. Accordingly, the members agreed to make a confidential internal analysis of the Public Health Science offerings in their own programs. Thus they could ascertain, from nine of the strong baccalaureate programs in the region, what the scope of an acceptable course should be and what its weak spots usually were. The rationale behind this approach was that special attention should be given in this project to content for which even well-staffed programs normally relied on outside resources.

The analysis showed that all nine schools used outside resource persons to present virtually all the material included in Biostatistics and Environmental Health, as well as a good part of Epidemiology. It was agreed, therefore, that in the completed course, more lessons should be devoted to these areas than to others. It was also agreed that, for the course to be of greatest benefit to strong and weak programs alike---and ultimately to the public health of the nation and world---the content must incorporate new and emerging knowledge and theories. Air and water pollution, radiation, and the whole area of the application of behavioral science to public health theory and practice were cited as examples.

The committee next gave attention to stating objectives for teaching each major block of material and to breaking down the major areas into subtopics and detailed outlines. This process continued over the remainder of the project period. Titles of two of the divisions were changed so as to allow for slightly different emphasis: History and Trends became Foundations of Public Health, and Community Organization became Organization of Health Services.

The committee agreed that the course should be planned to constitute the basic core of Public Health Science for the baccalaureate nursing student. It would not necessarily contain all that every classroom teacher would think desirable. It would be so designed that the classroom teacher who was prepared to do so would supplement in discussion and laboratory what was in the tapes. Written suggestions for classroom use of the series should be available in a teachers' guide. Further, the five major parts would not be planned for sequential presentation. Rather, they would be designed so that classroom teachers could select certain parts of the course or put its components together in different ways. Keeping the series flexible would insure its utility to the greatest possible number of schools of nursing, and would be most likely to accommodate the extensive curriculum revisions under way in many places.

Exploring Television

About midway of the first project year the committee seemed to experience difficulty in moving into specifics of content without having a greater familiarity with the medium to be used in presenting the content. At the same time, SREB wanted some visible evidence of the work of this and other content planning committees for information of Board members at the annual meeting. A pilot production was proposed as a means of meeting both needs. However, the deadline imposed by the Board meeting meant putting together a production with more speed than was desirable in view of the inexperience of the committee in this kind of activity.

"Medicare" was first selected by the committee as the subject for a pilot. It was to illustrate the processes and considerations that go into health legislation. However, project staff and the television staff at the University of Florida (selected by SREB to do the Public Health pilot) felt this subject could not be adequately researched and developed in the time available, and strongly urged that something else be chosen.

Possibilities were "brainstormed" first by a subcommittee who met with television staff, then by the full committee. It was decided to highlight the history of public health in roughly the past century, emphasizing problems and trends rather than historical events and dates, and introducing principles and concepts. At the same session, held in Richmond, a half-day was spent touring the Medical College of Virginia's audio-visual facility and viewing some of the videotapes made there. In a meeting at the University of Florida, the television staff showed the committee examples of tapes and art work demonstrating several principles and modes of presenting instruction on television. A subcommittee reported on a visit to KTCA (ETV station in Minneapolis-St. Paul) where a series on "Nursing in Society" was being videotaped. Further work on the pilot production was left in the hands of Mrs. June Remillet, the committee member at the University of Florida, and the UF television staff. Miss Roberts assisted with the preliminary research. When several segments had been recorded, the full committee was convened to criticize them and to give guidance for building a final production. "A Great Nation Can Do Better" was videotaped in June.

In a five-day meeting the following summer, a day and a half were devoted to a television workshop given for the committee by the School of Journalism and Communications of the University of Florida. The objective of the workshop was to give individual participants direct experience with television as a medium of instruction, before final decisions should be made about televised content of the proposed series on Public Health Science.

By the wish of the committee, "A Great Nation Can Do Better" was shown to nursing student and faculty groups in the participating institutions for evaluation. An instrument to assess general effectiveness and one to check on learning gain were used. Results indicated that on the whole students learned what the videotape was trying to teach, but that the production left something to be desired as a means of getting the viewer truly engaged with the subject.

The committee invited Miss Marjorie Lyford, of the College of Nursing, State University of Iowa, to describe the production and utilization of videotapes on certain Public Health topics in the Iowa Nursing program and to show an example of the work. This discussion was very helpful in clarifying for committee members the over-all conception of the project's series, which would differ from the Iowa productions in several important respects.

These three experiences---the television workshop, the evaluation of the first pilot, and acquaintance with the Iowa productions---directly influenced the committee's approach to producing a second pilot lesson. The first pilot had experimented with a variety of visuals and modes of presentation, with Mrs. Remillet as the narrator and interviewer who provided unity to the program as a whole. For the second, the committee elected to adopt a simpler format, using one specialist to present all the material, with only such visuals as might directly clarify and enrich the content. Epidemiology was selected as the field, with this particular lesson to be an introduction to the subject.

Committee members suggested several eminent epidemiologists who might be approached about doing the pilot. Existing films and tapes showing these individuals were collected. Nominees who had not already been recorded were invited to appear on a five-minute videotape. Under the guidance of the staff of KUHT (ETV station at the University of Houston), where the second pilot was to be produced, the committee held an "audition" with these films and tapes. Dr. Cecil Slome was selected and agreed to do a videotaped "Introduction to Epidemiology" as the second pilot. He read the committee's outline and prepared an audio-taped informal lecture which was transcribed and circulated to a subcommittee for reaction. The KUHT staff, together with Miss Edith Wright of Texas Woman's University, planned the visual treatment. Both script and visuals were modified when Dr. Slome, subcommittee members, and production staff assembled to put them together and record the lesson. The resulting production appeared to be highly successful. Project time and funds did not allow for its evaluation with student groups.

Detailing Content

When the members agreed on the five major content areas in the first meeting, they attempted as a committee to outline content for the first two. It quickly became apparent that this process was not viable, so members grouped themselves by two's, each pair to develop a single area of their choice. It was agreed that this work would be done between meetings and the written results would be presented at regular meetings for consideration by the committee of the whole. The project offered to cover travel and subsistence for subcommittee members to get together on assignments, and to pay for consultation as needed.

After studying the survey of public health science courses in the participating schools, the committee in its third meeting gave attention to formulating instructional objectives for the five divisions of the course. Each subcommittee submitted a statement of objectives which the whole group then discussed and refined. Then, in order to get a common perception of how the major content areas might be broken down into subdivisions, the whole committee worked on Community Organization as an exercise in outlining.

The several subcommittees worked in different ways and at different rates. By the time of the five-day session in the summer of 1966, one division---Biostatistics---had been outlined in final form; another---Environmental Health---had been outlined in some detail but was later extensively revised; the other three were at different degrees of completion. With the experience of the first production and some direct acquaintance with television behind them, the members at this meeting went through the entire outline, agreeing on first-level sub-headings and the number of half hour videotapes (out of a total of 30) to be devoted to each major area.

In the second project year the subcommittees wrote their final detailed outlines, which were brought to the whole committee for discussion and modification. Some suggestions for television presentation were included, as well as names of specialists who might be considered for the role of television teacher for certain subjects.

Conclusions

With the completion of the Epidemiology pilot and the refinement of the five outlines in the summer of 1967, the committee had fulfilled its function under the Cooperative ETV Project and was dissolved with the sincere thanks of the project staff. The deans of the participating schools of nursing agreed that a videotaped course, such as had been planned under the project, was badly needed in the region and that funds to produce it should be sought. Consequently, a proposal was submitted to the USPHS Division of Nursing by Texas Woman's University, with the written endorsement of the other eight schools. Word has since been received that this application was successful.

A backward look over the two years of planning suggests several conclusions regarding procedure that might be helpful to any future enterprises of this sort.

First, since this was a group that likedto operate democratically and as a committee of the whole, it would probably have expedited matters had there been an earlier organizational structure and placement of responsibility within the group. That this was not done was the result of the pioneering nature of the venture, with both staff and committee feeling their way, as it were, in the early months. Now, however, there is a precedent from which another such effort can profit.

Second, an earlier, well-planned, and thorough program of orientation to television as a medium of instruction would have helped the work of this group. Perhaps a week-long summer workshop in the first year would have made it easier for committee members to envision the end-product of their planning, and thus expedite the planning itself.

Third, though there are always fears that group planning may result in dilution of quality, the results of this committee's work indicate that this need not be so. Undoubtedly compromises on questions of content were made by individuals from time to time, and the course as planned does not contain everything each member would like it to have. However, the course as planned does represent a sound academic approach which all members endorse without qualification, and it undoubtedly has areas of special strength which are directly attributable to cooperative planning. If the televised course is produced, and if the production is of as high quality as the content planning, it will provide a rich resource for nursing education.

Part 3: Mental Health Concepts

The active period of the content planning committee for Mental Health Concepts extended from fall, 1965, through fall, 1967. In recommending mental health concepts as a high-priority subject, the deans and directors had stressed the fact that emotional problems are seen not only in mental hospitals but in all hospitals, and that nurses need to understand their role in relation to them. The charge, then, was to create a course in mental health that would be applicable to nursing in any setting. The content planning committee from the outset was in complete accord with this orientation.

Composition of Committee

The committee consisted of the following persons:

Miss Louise Atty, Daytona Beach Junior College
Mrs. Elizabeth Dutter, St. Petersburg Junior College
Mrs. Mary McCandless, Coordinator, Associate Degree Program in Technical Nursing, University of South Carolina
Miss Avis Pitman, Bronx Community College (Continuing Consultant)
Miss Dorothy Turner, Manatee Junior College

All were psychiatric nurses except Miss Turner, who functioned on the committee as a nurse generalist broadly knowledgeable in the mental health field. Dr. Mary Howard Smith, SREB, served as coordinator throughout.

Because of the small size of the committee, meetings were rather informal, with Dr. Smith doing such "chairing" as was needed. Individual assignments were carried on between meetings. Subcommittees were formed on an ad hoc basis on need and usually consisted of whoever was available at the time.

In the summer of 1966 Miss Turner found it necessary to withdraw because of the pressure of other work. The rest of the content planning committee remained the same throughout the project. Mrs. Constance Smith of St. Petersburg Junior College, who appeared as Teacher/Narrator in the pilot productions, was an ad hoc member of the committee at sessions where production planning was on the agenda.

Preliminary Course Plans

The subject assigned this committee proved elusive at first. It is a field in which philosophies and orientations vary greatly. It lacks the degree of concreteness which in some subjects makes outlining a relatively mechanical procedure. Further, the committee knew that the faculty shortage among two-year nursing programs is such that this course should be designed for use by teachers who might have little or no background for teaching it.

Certain emphases were agreed upon early and remained firm throughout the committee's work. These were: (1) that the course should be primarily directed toward teaching the student the importance of nurse-patient relationships and how to exploit them constructively for better patient care; (2) that self-understanding and self-acceptance should be shown as prerequisite for understanding and relating to others; and (3) that a positive approach to nurse-patient relationships should pervade the series, showing how the nurse can make use of the patient's assets and create an atmosphere of health.

A tentative list of five major areas was drawn up with the idea that it would later be developed into a detailed outline. However, in subsequent meetings it appeared that it was premature to delimit the general subject. The committee needed more time together and also needed to know more about the capabilities of the medium for which content was to be prepared. It was therefore decided to postpone further work on an outline until a pilot production would be designed and completed.

Television as an Instructional Medium

In its second meeting the committee had looked at videotapes made by the Nursing Department at St. Petersburg Junior College and tapes of student nurses working with patients at Montefiore Hospital in New York. They had therefore seen examples of especially prepared instructional materials and of recordings of "real life" situations. In preparation for working on their own production, the committee attended a workshop on television in the health professions, given at the Medical College of Georgia. Here each participant had an opportunity to handle basic television equipment and learn the steps required to put together a brief production. In its next meeting after the workshop, the committee met without coordinator or consultant, agreed on a format for two pilot lessons and roughed out script outlines. Further work on the script was done by Mrs. Dutter, of St. Petersburg Junior College, under the guidance of Holt Riddleberger of ETV Station WEDU as producer, and Edmond Cenedella of the SPJC Department of Radio-Television. Mr. Cenedella directed the production and Mrs. Dutter acted as liaison between production and content planning.

The first pilot actually consisted of two lessons on observation, incorporating brief written exercises in observation to be performed by the students watching the program. It was exciting to the committee members to see their ideas come to life on the television screen, and removed any lingering doubts about the appropriateness of the medium for their content.

Outlining the Course

The committee set aside a week in August for intensive work on course outline. Three days of the time were spent in drafting and discussing brief "position papers" on issues basic to the course. From this process there emerged a mutual understanding of the major aspects of the field---a shared approach which was eclectic in its philosophy. Once this was accomplished, a course outline fell into place rather quickly.

The group then agreed on the number of half-hour lessons to be devoted to each of the several sections of the outline and on a format for lesson plans to be worked out in further detail. Individuals volunteered to develop the lesson plans for specific sections, with this work to be carried on independently during the fall.

The detailed course outline finally compiled consists of lesson plans to form the basis for scripting thirty half-hour videotapes on the following major topics: Self-Understanding, Self-Acceptance, Acceptance of Others, the Nursing Process, and the Nurse-Patient Relationship. Recommended readings for students, bibliographies for teachers, and suggested laboratory or other assignments are included with each lesson. The purpose of the course is to impart to students a knowledge of mental health as it applies to all nursing. Committee members were unanimous in the conviction that such knowledge is prerequisite to psychiatric nursing just as it is to any other nursing, and that therefore the course should not deal with psychiatric nursing *per se.* The series is projected as nursing-centered, with illustrations drawn from nursing situations.

Second Pilot Production

In the late fall of 1966 the staff asked the committee to begin planning a second pilot production. After looking over the outline the committee decided that the content to be presented on the role of communication in the nurse-patient relationship would lend itself well to the purpose. The committee discussed and agreed upon the general dimensions of content for the televised lesson, and suggested certain possibilities for dramatized vignettes to demonstrate certain aspects of communication in the nurse-patient relationship. Details of scripting and visualization were left to those who would be working directly with production (Mrs. Dutter and Mrs. Constance Smith).

Problems beset the videotaping session, with the result that both the content planning committee and the production personnel agreed the pilot should be re-done. A new script was written, circulated to the content planning committee for comments, and then extensively revised by an *ad hoc* committee consisting of Miss Atty, Mrs. Dutter, and Dr. Smith. The new videotape was viewed and approved in September.

From the committee's point of view, two lessons about production of instructional materials for television were learned from the experience with the second pilot. One was that the subject matter has its own inherent dignity and interest; a simple, straight-forward approach to it was best. The second was that because dramatic or role-played illustrations of human relations are so valuable in presenting this subject matter, they demand very careful casting and preparation if they are to enhance rather than detract from the message of the material.

Conclusions

Project staff met with the directors of the nursing programs represented on this committee in the summer of 1967 to review what had been done. This group agreed that funds should be sought to produce the course that had been planned under the project. The directors believed there is a real need for such a recorded course and expressed a desire to continue participation by their schools in the production phase. Accordingly the Southern Regional Education Board has submitted a proposal to the National Institute of Mental Health for funds to produce the course under the guidance of an interinstitutional advisory committee and with additional two-year nursing programs participating in its evaluation.

The lesson plans developed by the content planning committee will serve as the basis not only for television scripts but also for students' and teachers' manuals. If money for television production is not forthcoming, the lesson plans could be rewritten as a textbook, which in itself would make a needed contribution to this sector of nursing education.

From a review of the two years of this committee's work, certain inferences about procedures suggest themselves:

(1) It takes time to establish working relationships and to arrive at common perceptions and shared conclusions. This was true even with a committee as small as this one, the majority of whose membership already knew each other through professional contacts in Florida. It suggests that progress might be made more rapidly if sessions were scheduled less frequently but for longer periods of time. The need for longer meeting periods was perhaps greater in this case because of the nature of the subject matter with which the group was concerned. Much of the content of Mental Health Concepts is inevitably abstract. That this is so, however, is an additional reason why it is worth the effort required to translate it into televisable terms for the two-year nursing student.

(2) The committee found that preparing content for televising is in itself a cooperative process, and that the content planner's job is not ended when a rough script is delivered to production personnel. While producers and directors traditionally do not make decisions on content, the decisions they do make on such matters as pacing, movement, visuals, and selection of role-players affect the content directly. Production details emerged, not merely as embellishments to enhance the subject matter, but as part of the message itself. In other words, the committee empirically discovered a difference between "televised instruction" and "Instructional Television."

APPENDIX II-D

PSYCHIATRY

Selection of Field and Pre-Project Activities

Like Nursing, Psychiatry was specified in the Feasibility Study proposal as a field for exploration, but for somewhat different reasons. In 1961-62 the SREB Mental Health staff had held a series of seminars on teaching psychiatry with members of the psychiatry faculties from the medical schools of the region. The work being done with television by the Psychiatry Department at the University of Mississippi and with film by the Psychiatry Department at the Medical College of Georgia aroused a great deal of interest among the professors who attended these meetings. By 1963 many psychiatry departments in the South either had minimal facilities for television and film or were acquiring them as rapidly as they could. (This development was not simply a regional phenomenon, but was nationwide.)

One of the early activities, therefore, under the Feasibility Study was to plan a regional conference on the use of television and film in teaching psychiatry. In preparation the project staff wrote to all departments of psychiatry in United States medical schools, asking for a list of filmed or videotaped materials they had on hand and were using. Replies from department heads clearly indicated which departments in the region were most interested and ready to move in the television and film media. Accordingly, the staff wrote six department heads, asking each to serve on the planning committee for the conference or to designate a member of his faculty to do so. At the conference, held in January, 1964, in Bethesda, Maryland, with the co-sponsorship of the National Naval Medical Center, filmed and videotaped psychiatric teaching materials were demonstrated. Also, presentations on various aspects of administering and using instructional media were included on the program. Discussion groups considered the uses of television and film in teaching: (1) undergraduate medical students, (2) psychiatric residents, (3) continuing medical education.

After the conference the feasibility of interinstitutional activity in media was further studied by a six-member committee of whom four were the same individuals who had served on the conference planning committee. This group viewed films and videotapes being used at the institutions represented, explored their teaching uses, and discussed content areas where videotape and film would be most helpful as teaching vehicles.

During both the Feasibility Study and the Cooperative ETV Project, the basic institutional composition of the committee remained the same. In some instances an institution acquired two representatives through sending a substitute who would then become a permanent member of the committee. Dr. Earl Sommers of the University of North Carolina had to drop out at a time when his department had no substitute to recommend. Emory University was added to the committee in the final year. Committee membership has consisted of the following:

William A. Cantrell, Baylor University College of Medicine (Chairman)
John J. Haksteen, Medical College of Virginia
L. C. Hanes, University of Mississippi Medical Center
Lou Woodward Marshall, Medical College of Georgia
R. Layton McCurdy, Emory University School of Medicine
Richard M. Meiller, Medical College of Virginia
Floy Jack Moore, University of Mississippi Medical Center
James Earl Sommers, University of North Carolina School of Medicine
Joe P. Tupin, University of Texas Medical Branch at Galveston
Robert White, University of Texas Medical Branch at Galveston

Duff Browne worked with this committee in a staff capacity 1964-65 and Mary Howard Smith 1965-67.

Content Planning and Pilot Production

The committee agreed that in recorded material to be shared, the point or message must be self-contained if the product is to be a good teaching device; material must thus be structured so an individual institution could use it in any way. The members decided that a "visual textbook" on psychopathology could be created that would meet these criteria and would fill a real need in the teaching of undergraduate medical students. They worked out the major areas all would agree were esential to the undergraduate psychopathology course, and individual members took responsibility for outlining one or two of them. When the several outlines were brought to the committee, group discussion produced a few modifications in the over-all list; then one member was to take the topical outlines and work them into a consistent whole. The result would be a syllabus that would form the basis of the "visual text."

As it turned out, the committee member who was to do the major writing job was unable to obtain approval for released time in which to do it. The committee as a whole suspended work on the outline pending completion of a pilot production on "Mechanisms of Defense."

The pilot was produced by the Department of Psychiatry of the University of Mississippi. In committee discussion before production began, there had been a lack of consensus as to whether it was to be a "production" in the sense of being a scripted and narrated complete lesson, or whether it should simply be selected case materials illustrative of defense mechanisms and "produced" only to the extent of being edited and put together. Consequently the University of Mississippi did both. When the committee viewed the two productions, members attempting a comparative evaluation considered the advantages, disadvantages, possibilities for utilization, and suggestions for revision of these two ways of presenting material on mechanisms of defense.

At the same time a subcommittee (Drs. Cantrell, Tupin, and White) brought to the group a cross-classification system, relating specific psychiatric phenomena to the topical outline previously worked out. The committee discussed the question of whether the content tabulated on the classification system would best be illustrated by "educational packages" especially produced for this purpose or by appropriate videotaped "raw" patient material. They agreed that selected and edited case materials would have more teaching utility than would "productions."

At this point the committee saw as its objective the creation, first, of an annotated library of psychopathology materials, and second, an audio-visual text and other uses of the library material. The rationale for creating a library was explained in a Position Statement drafted by Dr. McCurdy and subsequently adopted by the committee in March, 1967.

The Committee's Position Statement

The Content Planning Committee of the SREB Psychiatry ETV Project met in January, May, and November of 1965, August of 1966 and March of 1967. The group discussed issues concerning a co-operative, inter-school, audio-visual project to compile an annotated library of videotapes for the purposes of psychiatric instruction for medical students and other mental health professionals. Questions were raised as to the value of such a library; to what use it would be put; would the gains be commensurate with the costs; and the general value of audio-visual teaching.

In this discussion the following items were clarified:

(1) The major part of the psychiatrist's clinical skills are associated with his visual and auditory observation. These modalities of clinical examination are developed by the psychiatrist through his years of training and clinical experience. In the past, there has been a wide diversity of disagreement among psychiatrists concerning matters of substantive knowledge. A great portion of psychiatric knowledge is arbitrary and theoretical. In spite of these facts psychiatrists tend to closer agreement in areas where their clinical observations are compared. For these reasons the major thrust of psychiatric teaching has been in the direction of clinical teaching. There has been a substantive body of knowledge but this body of knowledge takes on real meaning in the context of the psychiatric patient. Moreover, because of the nature of psychiatric skills the patient is looked at and listened to rather than palpated and auscultated. So the use of this patient material is of paramount importance in the teaching of psychiatry.

(2) The use of patients for psychiatric teaching in the past has produced various results. The individual with a particular physical finding can be seen at any point, with the expectation of reproducing the physical finding, but the psychiatric patient with a particular behavioral abnormality cannot always be depended upon to demonstrate this abnormality on request. In addition, human beings are such that behavioral manifestations are always influenced by the presence of strangers and more so by the presence of large groups of strangers.

(3) Large amounts of time are required by instructors for the purpose of locating appropriate clinical material to augment psychiatric teaching. One must have available a rather large

number of psychiatric patients to find, at any given time, a patient who will demonstrate a specific area of psychopathology. Any reduction of this time would be of value.

(4) Evidence of improvement in psychopathological conditions is manifest only after long periods of observation and treatment. The usual rotation for medical students on a psychiatric service is from four to eight weeks. Unfortunately this does not allow sufficient time to observe a course of psychotherapy so that the student can see the psychotherapist in action, observe the transactional operation, and see change in the patient in connection with psychotherapeutic efforts.

(5) The need for clinical material available to students for independent study has long been known. The need for audio-visual material to be used in conjunction with a syllabus for independent study by students has long been felt and would provide a valuable experiment in medical education.

In order to meet some of the above listed difficulties the Content Planning Committee of the Psychiatry ETV Project recommends the formation of an annotated videotaped library. This library would provide a well catalogued and annotated collection of patient material which could be readily available to both the teacher and the student. It would not "stand on its own" but would have to be supported by material presented by an instructor or by material available in a syllabus. The library would not impose upon any medical school the psychiatric orientation of another school, but would simply present patients whom students could see and hear, thereby utilizing those modalities which the psychiatrist relies upon in his clinical activity.

Further Plans for the Library and Visual Text

The library was conceived by the committee as bringing together and making available the best videotaped clinical material from a group of cooperating medical centers. Schools contributing material would use the classification system to identify needed material in that being taped routinely in their television installations. To test the feasibility of spotting and describing a segment of tape that would fit into the classifications, the committee drew up and tried out a form to be used by psychiatrists in participating departments.

Procedures for developing the proposed library and circulating its materials were outlined by the committee as follows:

1. Tape segments of appropriate clinical material would be identified by the above process and sent with annotations to a central office.

2. The library staff would review, edit, and transfer it to a master tape.

3. Copies would be made and would be available for loan or purchase. Either videotape dubs or film transfers could be made, depending on the equipment in the borrower's or purchaser's institution.

4. The staff would be charged with further development of the classification system with the assistance of an advisory committee representing the cooperating departments.

5. The staff would notify the cooperating departments of gaps in the case material.

6. The staff would develop a card catalog description of each tape segment, including case histories where appropriate. Tapes would be cross-referenced as appropriate.

7. Professors using the tapes would be asked to send in criticisms and suggestions. New materials would continuously be acquired to assemble better and better examples. Thus the "text" would be a constantly working dynamic body of material.

Initially the library would create a "text on tape" for teaching psychopathology to undergraduate medical students. Long-range plans would call for the collection of other kinds of materials for other teaching purposes.

Since the final meeting under the present project, the content planning committee has drafted a prospectus to form the basis of a grant proposal and has explored sources of funds and other kinds of assistance, with some encouragement. The members feel very strongly that the "text on tape" and library will fill a serious teaching need for the improvement of instruction in psychiatry.

APPENDIX II-E

TEACHER EDUCATION

Part 1--Background:

Selection of Field and Pre-Project Activities

Beginning in about 1961 the Southern Regional Education Board held a series of informal discussions with leaders in the field of Teacher Education in the region in an attempt to clarify SREB's proper relationship to this sector of higher education. From these conversations over a period of two years it emerged that the whole problem of new instructional media was one with which Teacher Education needed help and in which a regional effort might be very useful. On that basis the field of Teacher Education was specified in SREB's proposal for the Feasibility Study.

A nucleus of persons who had been involved in most of these discussions was selected to assist the Board in further planning. This group consisted of:

Dean Ralph Cherry, School of Education, University of Virginia
Dr. Kenneth Christiansen, Department of Radio-TV, University of Florida
Dean E. C. Merrill, School of Education, University of Tennessee
Dean Truman Pierce, School of Education, Auburn University
Dean J. B. White, College of Education, University of Florida
Dr. Lee Wilborne, Assistant Commissioner of Education, Texas

On recommendation of this steering committee, a regional conference on the role of newer media in teacher education was held in May, 1963, in Athens, Georgia. Invitations were limited to institutions giving the doctorate in teacher education (then 35). About 65 people attended the conference. Several media were demonstrated and were available for the participants to examine. Discussion groups focussed on the uses of media in the pre-professional, professional, and in-service curricula. The discussion groups recommended specific projects for cooperative preparation of instructional materials.

After the conference the steering committee reconvened to review the recommendations and select for further attention those seeming at once significant and feasible. By grouping and combining the recommendations the committee proposed two projects which they believed would be of real assistance in improving teaching education. One of these was to be a series of illustrations of teacher behavior. They argued that there were reams of film and videotape showing child behavior but very little to show how a teacher behaves or might behave in a given situation. For another production they recommended designing materials to make concrete, visible, and alive for the typical undergraduate the concepts that he often finds highly theoretical and professionally irrelevant in the course on Social Foundations of Education.

On the advice of the steering committee the project staff wrote the deans of the doctorate-granting schools of education, describing the two proposed areas for production and asking each dean to nominate a faculty member to serve on the content planning committee for either or both, with the stipulation that faculty members would be sent at institutional expense. The steering committee recommended this very strongly as a means of gauging the seriousness of institutional interest in the project. Two committees of eleven members each were nominated. (There was later some attrition in both.) After the initial meeting, the requirement of institutional funds was removed, as it had served its purpose and as project funds were actually available for travel. For the first half day of the first meeting the two committees met together for orientation to the project. Thereafter they met separately.

Both committees actually began the work of content planning in 1964 under the Feasibility Study. In order to give a complete story of the content planning process, the following reports include the work done prior to the summer of 1965 when the Cooperative ETV Project officially began.

Part 2--Social Foundations of Education

The Content Planning Committee for Social Foundations of Education held two meetings under the Feasibility Study project and seven in the two-year period of the Cooperative ETV Project. Its membership consisted of the following:

Dr. Henry B. Easterling, Department of Educational Foundations, University of Southern Mississippi
Dr. Raymond C. Forston, Associate Professor of Sociology, East Texas State College
Dr. Judith R. Joyner, Associate Professor of Education, University of South Carolina
Dr. Hal Lewis, Professor of Education, University of Florida
Dr. Howard A. Ozmon, Jr., School of Education, University of Virginia
Dr. Robert W. Plants, Assistant Professor of Education, University of Mississippi
Dr. Robert J. Stalcup, Chairman, Department of Foundations of Education, Auburn University
Dr. Paul A. Wishart, Associate Professor of Science Education, University of Tennessee

Dr. Mary Howard Smith of SREB's ETV Project staff served as coordinator.

Although there was some diversity of teaching responsibility and major research interest among the membership, all were expierenced in teaching Foundations of Education and held strong convictions about the importance of Social Foundation to the improvement of teacher preparation.

Foundations of Social Foundations

The committee members made it clear in the first meeting that they were not interested in planning a complete "canned" course. They were unanimous, however, in believing that good filmed material was very useful in helping students to acquire more than a rote, abstract understanding of the issues and problems involved in Social Foundations. By the same token, good videotaped material should also be useful.

The group began by identifying the topics or concepts all would agree they would regard as essential to the course. This was not an easy task. It is perhaps suprising that it was accomplished in one meeting. When it came to assigning priorities to these topics (which turned out to be ten in number), the members expressed a desire to discuss the matter with their colleagues back home. After consultation as proposed, they sent back by mail their list of topics in priority order. The related topics of Social Class and Class Values emerged as Number One from this Survey. The decision was therefore made to concentrate for the time being on social class value judgments.

The committee then worked toward creating a series of dramatized episodes to illustrate some of the ideas they normally tried to get across to students about social class value judgments. A subcommittee of two was appointed to define this area of consideration more precisely. The subcommittee proposed that efforts initially be confined to illustrations of social class value judgments as they affect various aspects of the operation of the school system -- in teacher-student relationships, extracurricular activities, discipline, etc. The group generated suggestions for scenes and episodes that might be developed. Drs. Stalcup and Ozmon worked on these individually at home, then spent a day in Atlanta with project staff for additional work and exchange of ideas. In this manner ten episodes were written illustrating various ways in which social class value judgments affect day-to-day activities in the public schools. Dr. Lewis wrote an introductory unit designed to set the series in perspective, and Dr. Wishart drafted a prospectus and rationale for producing all ten.

First Pilot Production

In February, 1966, the committee met at Auburn University to discuss with the Auburn ETV staff the possibility of producing one of the ten episodes as a pilot. At this time the group agreed that interaction among social classes is what brings out the differences in value systems that the school is one of the major arenas where interaction takes place, and that existing recorded materials on social class do not demonstrate the importance of interaction. It was therefore decided that a new episode should be written especially for the pilot, incorporating the principle of interaction. The final script included the introduction already drafted and a new episode written by Drs. Ozmon and Stalcup. Dr. Forston reviewed it for sociological validity before production began. "Both Sides of Town" was produced in the summer of 1966.

The committee wanted to try out the pilot production on student groups to assess its effectiveness in presenting differences in social class value systems. Dr. Wishart designed an evaluation form for this purpose and each member held an evaluation session at his institution during 1966-67. Evaluating groups included faculty members, graduate students, and undergraduates. Results indicated that most viewers regarded the film as fair but not outstanding. The committee expressed some uncertainty that the evaluation really elicited the viewers' comprehension of the issues presented in the film. Most members believe that, despite certain technical flaws, "Both Sides of Town" could be very useful in stimulating classroom discussion.

Outline for Series

After completion of the first pilot production the committee returned to the idea of a videotaped series that would explore and illustrate the basic concepts of the Social Foundations of Education. The original list was reviewed, refined, and revised. Members volunteered to work on bibliographies and either outlines or position papers for the major topics in the revised list. Interim reports were discussed and modified by the committee in the spring of 1967. Final reports were submitted in the summer as follows:

Educational Issues in Church-State Relations -- Wishart
Curriculum Change: Influencing forces -- Stalcup

Teaching as a Profession--Lewis
Pressure Groups and the Schools--Ozmon
The American Value System--Forston

Originally the group had agreed to include suggestions for visual presentation of the material. However, some members of the committee found it difficult to think in these terms. It was decided that if possible Dr. Ozmon should be employed to do this for the entire outline at such time as a proposal should be drawn up to seek production funds for the series.

It was agreed that the ultimate series should consist of two half-hour videotapes on each topic, with a variety of types of presentation rather than a uniform format. Most would not be expository. None would give answers or propagandize for a particular point of view. Rather they would underline issues and raise questions. Their proper classroom utilization would be as springboards for discussion.

Second Pilot Production

Concurrently with resuming work on the over-all outline, the committee began thinking about a second pilot production. It was decided that the material in "Pressure Groups and the Schools" would lend itself well to this purpose, and Dr. Ozmon agreed to draft a preliminary script. He submitted two, one for cartoon treatment and one for dramatization. The project staff sent the scripts to the South Carolina ETV Center for reaction. The Center staff believed the cartoon script would be more feasible to produce in the time available than would the other, and a revised script was brought to the full committee for further suggestions. "The Story of Gork, Educator" was produced as a cartoon with partial animation. The committee reviewed it in August and made plans to try it out in the classroom in the fall.

Conclusions

Many members of the committee felt that by the time of the final meeting the group had only recently arrived at the point of being able to work as a "team". They also indicated they were just acquiring enough insight into the production of visual instructional materials to go ahead with the full scale series of videotapes. The staff is of the opinion, in retrospect, that a "do-it" workshop on visual media, given at the beginning of the project and lasting three to five days, might have expedited both the intellectual group process and the realistic appreciation of the media.

The group agreed that the experience of planning cooperatively and sharing ideas had been challenging and productive. The committee asked to go on record as recommending that the Social Foundations series as projected would provide a rich teaching resource and that funds for its production should be sought.

Part 3: Teacher Behavior

Like the Social Foundations group, the Teacher Behavior Committee held two meetings under the Feasibility Study and seven under the Cooperative ETV Project. Its membership in the second project phase was as follows:

- Dr. Roscoe A. Boyer, Professor of Education, University of Mississippi
- Dr. Frances Fuller, Coordinator, Assessment and Counseling Division, Research and Development Center for Teacher Education, University of Texas
- Dr. James H. Mailey, Chairman, Department of Educational Administration, University of Southern Mississippi

- Miss Eugenia Mauldin, Assistant Professor of Education, University of Tennessee

- Dr. John W. Plunkett, Assistant Dean, School of Education, North Texas State University

- Dr. Stanley S. Stahl, Assistant Dean, School of Education, University of Virginia

- Dr. Kenneth Wiggins, Director of Student Teaching, Oklahoma State University

Dr. Thomas J. Moffett, then Assistant Principal of the P. K. Yonge Laboratory School and a member of the University of Florida College of Education faculty, served as continuing consultant to the committee in 1967. Dr. Arthur Jacobs, of the Department of Radio-TV, University of Florida, met with the committee frequently in 1967 in connection with the second pilot production. Duff Browne served in a staff capacity on this committee in 1964-65, and Mary Howard Smith in the 1965-67 Cooperative ETV Project.

Committee Organization and Methods of Work

Dr. Stahl was chairman of this committee throughout. Under the Feasibility Study a subcommittee, consisting of Drs. Stahl, Mailey, Plunkett, and Wiggins, drafted a report dated June, 1965, that became the basis of the committee's work in the Cooperative ETV Project. Thereafter subcommittees were used on an ad hoc basis in connection with pilot productions. Dr. Boyer headed up the development of an evaluation instrument for the second pilot production and the analysis of results.

In 1966-67 the project employed Dr. Kenneth Wiggins one-fourth time as academic coordinator, maintaining liaison with committee members on matters of content and production and establishing contact with other projects having interests in common with this one. Dr. Wiggins drafted a final report of the Teacher Behavior project which, with a few modifications from committee members, appears below.

Committee Report

The initial discussion was concerned with tasks that must be performed and areas that must be studied in order to assure the successful preservice training of a teacher. Most institutions were found to have programs which incorporate the following elements:

1. Observation and laboratory experience
2. Educational Psychology
3. History and Philosophy of education
4. Methods and techniques of teaching
5. Student Teaching

The sequence of these programs varied somewhat, but they conformed enough to make further exploration fruitful. The "teaching tasks" identified as most essential and needed most by the students of the member institutions were as follows:

1. Class preparation
2. Control
3. Individualization
4. Personnel relationships
5. Presentation
6. Routine
7. Planning
8. Materials
9. Patterns of Curriculum
10. Evaluation

The regional aspect of the project was emphasized and this was reiterated in June, 1965, report which specifically called attention to the essential nature of regional cooperation, planning, production, and utilization. Four basic reasons for regional cooperation were emphasized: (1) The isolation of many smaller institutions from large public school systems prevents pre-student teaching observation. (2) The cost of production precludes smaller institutions from developing adequate aids on their own. (3) Independent effort results in duplication of both procedure and result, thus wasting talent and funds. (4) Assembling the best resources and talent from several institutions results in a broadened and creative pattern and, ultimately, a product more easily adapted for use by all.

The following format was proposed for televised instructional material dealing with teacher behavior:

First stage: Identifying a classroom incident and capturing it on tape

Second stage: comments upon this incident by a panel of selected experts

Third stage: a commentary, setting forth the challenge.

It was felt that in order to attract regional utilization the episodes would have to appeal to teacher training programs at all grade levels and all teaching fields. Also the broad aims of education would have to be served, specifically the various kinds of learning, including (a) the acquisition of knowledge, (b) the development of basic skills, (c) values and attitudes, and (d) concepts and generalizations.

It was thought that the episodes would use a technique to contrast the ineffective and effective teacher, allowing the student (and the instructor) a comparative glimpse of the competent and inept, the taught and the untaught. The programs were intended to be not prescriptive but thought-provoking and suggestive of teaching techniques so that they would be usable by different instructors. The committee decided that the format itself might make the series prescriptive as it would not allow for flexibility of method for different classroom situations, and it was discarded.

First Pilot Production

At the March 30-31, 1966 meeting the committee agreed to make a pilot videotape. The purpose of the pilot production was two-fold: to demonstrate to possible funding agencies what the completed series would be like, and to give the content planning committee production experience.

The committee decided that the pilot program should give an overview of the developmental tasks of teachers and the complete series would go into each task more deeply. The series would consist of 12 programs: an overview, ten "in-depth" programs, and a summary. Its primary target would be undergraduate students about to go into student teaching assignments, but it was envisioned as also being useful for other professional educators such as in-service teachers, administrators, supervising teachers, and teacher training instructors. Lay people who have a vital interest in the educational process, such as teacher aides, school board members, service organizations, citizen advisory groups, and PTA organizations, would also find these films valuable. The pilot tape entitled "Teaching Is. . .," was produced by the University of Texas television staff with Dr. Fuller providing liaison between production and content planning.

The pilot tape attempted to focus on seven developmental instructional tasks which were derived from a reordering and consolidation of the ten "teacher tasks" originally proposed. The script was mailed to committee members before production. The seven developmental instructional tasks were as follows:

1. Where do I stand? (The school environment-physical plant, school

policies and routines, etc.-and the student teacher's place in it.)

2. How adequate am I? (Student teacher's concern with discipline and content.)

3. Why do they do that? (Interest in individual differences; understanding and managing children's behavior.)

4. How do you think I'm doing? (Student teacher's concern for evaluation of her performance by cooperating teacher, principal, college professor.)

5. How are they doing? (Developing concern with children's learning; interest in testing, listening, observing.)

6. Who am I?

7. How does what I am communicate to what they are? (Interaction; successive hypothesis testing; successive judgments about relationship with children-succeeding or failing and re-hypothesizing.)

8. "This is teaching."

The Evaluation Panel for the Cooperative ETV Project had directed that some evaluations should be conducted on experimental productions. The Content Planning Committee for Teacher Behavior recommended that evaluation of "Teaching Is....." be designed to ascertain how acceptable it is as a teaching device, what specific difficulties may arise in its use in the classroom, and what classroom benefits may accrue from it. It was thought it should be tested with several different kinds of groups---for example, junior-level observers going out into the public schools, plus their instructors; student teachers; representative groups of teacher training instructors. The evaluation instrument was to be a composite of suggestions made by the committee.

Partly because the seven developmental tasks introduced in the pilot are present in the execution of any one instructional task and their chronology or progression is overlapping rather than discrete, it was decided that it was too difficult to present these seven concerns visually in a clearly comprehensible manner. The evaluation instrument, executed by 457 students and 294 professional educators in Oklahoma, reinforced this opinion. The University of Tennessee did a similar evaluation. It was decided to return to the original ten "teacher tasks" as a basis for the series. A methodological approach is to be used in presenting the ten instructional components, employing incidents centered on a teaching problem and following with comments and/or alternative solutions. However, flexibility will be maintained and it will not be necessary to use the same format throughout the series.

Second Pilot Production

The committee recommended that a second pilot program be produced with a simpler approach. The Television Department of the University of Florida agreed to produce the second pilot.

The second pilot program was produced with the cooperation of Television Station WUFT at the P. K. Yonge Laboratory School, University of Florida, in the spring of 1967. Entitled "Teaching Is...One and Many," it deals with the individualization of instruction and presents a real classroom videotaped while the teacher worked with the elementary pupils on mathematics assignments. The committee was highly pleased with its content, but recommended that, because of limited technical faults, it not be made available for general distribution.

Results of Committee's Work

Although the main project has been to explore the possibilities offered by the use of ETV on a regional basis, several other important benefits have emerged from this effort, one of the most important being increased cooperation among the participating institutions in all phases of teacher training. This has, in a sense, developed a rationale for the entire proposed series as presenting problems from throughout the region; students are given a much broader overall view of educational problems which, it is hoped, will make them less parochial in their viewpoint.

Another important aspect of the committee's work was the involvement of agencies and individuals other than schools of education--for example, individual school districts, media departments, state departments of education, federal agencies, students, experts in the behavioral sciences, teachers, and school administrations.

Future productions will be based upon the ten "teacher tasks," will be short (30 minutes), will be discrete so that individual instructors may vary presentation to fit their teaching methods and the program of their institutions. The series will deal with three levels (early childhood education, pre-adolescence, and adolescence) so as to make them useful for both elementary and secondary majors.

The committee feels from its experience that to present live, unrehearsed classroom activities may be the key to successful teaching material in this area, as the students and teachers must show genuine involvement. The live, in-class production has a general focus in what it is on-going and open-ended. For specific focus, the production would use professional actors, be tightly structured and scripted, with a single conclusion possible. The projected series therefore will use scripts that merely outline the situation to be presented; a master teacher will demonstrate in her usual class situation. This will require the cooperation of the kinds of schools where creative teaching is encouraged, and will, in effect, make the entire Southern Region a laboratory in which the committee will attempt to identify good teaching. It will provide for teacher trainees common experiences not available in their own communities.

It is also felt that the tapes must be produced within the region, dealing with problems found in the region and dealing with as many agencies as possible, not only to enlist their cooperation but to make the series as professional and useful as possible. This was the original concept, and the committee feels that many common problems have been identified and that the incorporation of these elements plus the involvement of many people will give the films a wide acceptance throughout the Southern Region.

Institutions participating in this project have demonstrated the ability to match content with the appropriate media and to exchange information and ideas. Because they have developed along these lines, evaluation instruments, although subject to revision, have been developed which will give feedback on the effectiveness of materials in a relatively short period of time. Other benefits have accrued from this program, as well, including discussions concerning other phases of teacher training and the investigations of the rationale behind various facets of the teacher training programs. For example, the amount and placement of behavioral science courses in the program, the role and content of general education, and the number of cognitive courses, have been problems which were investigated. The various methods of assigning student teachers and the length of assignment are problems which have been discussed and which seem to be worthy of still deeper investigation.

Also, there seems to be a growing tendency for participating institutions to utilize the special competencies they have found various committee members to possess as well as to utilize more frequently special competencies of members of other disciplines within their own faculties. Through cooperation of the sort demonstrated by this committee, schools of education have reached both outward and inward for new ideas and have shown that it is possible to make the interdisciplinary approach functional.

APPENDIX III

REPORT OF MEDIA STANDARDS COMMITTEE

A. PREAMBLE

1. The Educational Problem

As this committee works, these problems are visible as areas that could/should/must be faced:

a. Enrollment Increases

These increases are seen as strains on existing physical facilities within which educational institutions operate. The strains are detectable as pressures in space and time. Increased "gatekeeper" operations may stem this tide; however, the degree to which this problem can be reduced by regulation is an open question.

b. Shortage of Instructors

The rapid proliferation of colleges, the increased opportunity to pursue full-time research, and the "publish or perish" syndrome have worked separately or in concert to tighten the academic market and mark qualified teachers as increasingly rare items.

c. Limitations of Facilities and equipment

With continuing cost spirals institutions are faced with the problem of making each dollar go as far as possible. Increases in operating costs strain at fund limits so that institutions, although desiring additions to facilities and equipment, are sometimes forced to forego these in order to maintain or repair the present equipment. This limitation, in the face of the first two problems, aggravates the educational problem.

d. Knowledge Explosion

The proliferation of knowledge has created the problem of increasing the volume of input per unit of time. Courses are increasing in content to include additional factual and conceptual discoveries. With the accelerated input rate should go an increase in digestion or internalization rate. A related problem is the obsolescence threat--the fact that today's education will be out of date within a number of months or years. This calls for greater efficiency in the presentation of knowledge so that more may be assimilated per unit of time.

e. Geographical Isolation

A concomitant problem is that of isolation in terms of non-availability of educational tools or constructs which are either desirable or necessary in present frames of reference to produce the educational product. For some this means availability of hardware, literature or equipment. For others this means availability of models or practitioners of an art wherein cultural gains and breadth are appropriate and/or necessary. For still others this may mean the availability of colleagues with whom they may interact to test or try ideas, hypotheses, or theories. Seminars and discussions afford a viability and psychological charge not inherent in written reports of work in progress or completed. This isolation has an effect on students as well as faculty---expecially if provisions are not sufficient to support travel to regional or national meetings. Moreover, many national meetings once fostered for interaction value have evolved quite different formats and frequently have narrowed their coverage so that attendance at one is a one-discipline exercise rather than a broad educational experience with interaction available among members of several disciplines. All too frequently the meetings have become one-way lectures.

f. The Secondary Level Quality/Quantity Explosion

Educators concerned with and about secondary level course content have come to grips with the knowledge explosion problem by refining secondary school curricula and courses. Consequently, what was once a college course is now often presented, or at least introduced, at the secondary level. College faculties cognizant of these changes are then forced to upgrade undergraduate courses. With this comes the problem of heterogeneity of students in a college receiving students from "good" as well as from "bad" secondary schools. The students, if accepted, must be taken from where they are to the next higher level. For some this is a gradual upward move; for others it requires a sudden and rapid elevation.

g. Changing Nature of the Student Body

(1) In some areas this change is reflected in the increased number of older students whose goals may not be the acquisition of a marketable ability but in the development of (or satisfaction of a desire to be) an educated person with a sharpened awareness for a broader spectrum of the cultural or world things. These students, no longer pressured by the need of becoming, may wish to settle and plumb the depths for a while.

(2) With the increase in availability of education, coupled with the knowledge explosion, has come the need for advanced degrees that better fit the student in an increasingly competitive market place. Where once a graduate class was a handful of students who could be instructed and guided by a professor and could interact with him and their peers, the graduate rolls have ballooned so that the professor now finds his log loaded with students at the opposite end with no balancing of the load on his end.

(3) Moreover, the student body has changed in that the students are more likely to be involved in regional, national, and international affairs than was the case in the past. With this involvement comes the pressure or need for answers, many of which are not available on a provincial or unidisciplinary basis.

h. Changes in Faculty Roles

(1) Recognizing that although students can be categorized in general terms their educational development is, nonetheless, an individual problem, faculty members are becoming increasingly and acutely aware of individual differences in their students.

(2) Furthermore, the goals and methods of education are being questioned so that the lecture system, among other things, is being challenged. If individual differences are to be recognized, then the efficacy of a lecture for a large number of students comes under fire. Faculty members are recognizing that a more efficient method of conveyance is independent study which ties readiness and availability together in the educational package.

(3) Faculty members, aware of the frailty of the human memory, are tending to modify their self-images so that they now see themselves as guides in the educational process rather than encyclopedias of concepts and facts. In this area also lies that problem of determining the relative values of subject-matter versus thinking-process. The question of what do I expect my students to be able to do, or do differently after they have had this or that course, is being raised.

2. Media Contributions

Past experience with instructional television warrants the premise that no course exists that cannot be presented on television if the design is right. Contributions the use of media can make to instruction include the following:

a. Classes which enroll large numbers of students can be broken down into small receiving groups wherein identification and group action can be more easily accomplished. Moreover, the taped lectures can be run frequently and the enrollment spread throughout the day and evening hours to reduce the pressures placed on teachers and classroom facilities by large enrollment courses.

b. Image multiplication permits one instructor to present the lectures and guide the work of the assisting teachers.

c. The use of televised experiments can "stretch" existing equipment.

d. Since students learn at different rates it is possible for the slow learners to have a second chance at the presentations through scheduled reruns.

e. Television makes well-known personalities available for a close look. Interaction may be vicarious through identification with students who take part in a televised lecture/discussion.

f. The medium affords the opportunity to have extra lectures available to those who need additional background materials. This would fall in the realm of remedial work, but could be handled as a side-line assignment for those in need of this type of help.

g. The instructor, freed of the tedium of giving multiple lectures, can devote time to those students who want to go into the field in some depth.

h. Image multiplication takes care of the regular lectures. The time gained affords more time for conferences with students, for analysis of teaching goals, and for inter-disciplinary planning.

i. Faculty members who want to do so may adjust to individual student needs. Courses of different levels can be designed and presented in parallel.

j. The televised presentation can get away from the "talking face" and into a visual presentation utilizing such things as inductive reasoning based on experiments or techniques of art based on the work of an artist. Some semantic difficulties can be reduced with the use of the visual pictures rather than verbal descriptions.

3. Nature and Value of An Interinstitutional Approach

a. The interinstitutional approach makes possible a broad-based sharing of people (personalities, catalysts, motivators, characters) and facilities. This possibility usually far exceeds the degree of sharing possible within one institution.

b. Interinstitutional sharing can effect a catalyzing self-analysis wherein course content and goals can be examined for congruity between institutions.

c. Where the interinstitutional approach is operational, communication and interaction increase, even perhaps between components of different disciplines. New syntheses, or possibilities thereof, can take form.

d. Interinstitutional approaches cause a decrease in parochialism. The student can see the community of scholars as encompassing more than those with whom he has come in contact on his campus. All are now seen to be searchers after truth and the departure from these ivy-covered walls does not mean departure from the search or a completion of the search even though a degree is borne away.

e. Interinstitutional endeavor increases the possibility for faculty members to become aware of broader parameters within which they can conceive and operate in their fields. This stimulates a growth process rather than one of circumscription set for all time.

f. Finally, the interinstitutional approach offers the possibility for series or segments of instruction too expensive in time and/or money to any one institution to be supported, brought to operational levels, and realized.

4. Focus of the Report

Where the spheres of educational problems, media contributions, and the nature and values of interinstitutional approaches cross or overlap we visualize the focus of this report. We are of the opinion that the focus lies in the answer that each brings to the question of what should be expected of interinstitutional cooperation over and above that which should be expected of an individual institution's capability of accomplishment.

Mary Howard Smith
Joseph Wood

B. EXPERIENCES WITH INTERINSTITUTIONAL COOPERATION

1. Origins

Most attempts to establish cooperative interinstitutional television projects involving higher education reflect earlier patterns of joint effort by institutions within a single state or within a region, banded together by compact in a new kind of interstate agency. That agency could serve as a catalyst, a clearing house for information, a mechanism for sharing educational resources, and on occasion as a contract agency mounting a cooperative program on behalf of all its members.

Familiar examples of the regional organization include the 15-state Southern Regional Education Board, the 19-state North Central Association of Colleges and Secondary Schools, the Committee on Institutional Cooperation (the "Big Ten" complex and the University of Chicago), and the 13-member Western Interstate Commission for Higher Education. All of them in different ways saw television as important in furthering their basic purposes.

While each of these agencies has been formally concerned in varying degrees with applications of television to higher education, the SREB effort beginning in 1952 with the Southern Regional Project on Educational Television has probably been the most comprehensive and continous effort.

SREB, concerned from the outset with television networking as well as ETV station activation, was the first to see the real potential of interinstitutional interconnection.

In 1952-53, nine Southern states passed ETV legislation. Alabama and Oklahoma were the first states to fund ETV facilities and respectively the first and second to activate state networks. The University of Houston put the first ETV station on the air in 1953.

In 1955 SREB began study of an interstate television network to interconnect all four-year institutions and ETV stations in the region. In 1957 the agency presented testimony before the Federal Communications Commission, arguing for the reservation of microwave channels for interstate use by higher education. The resulting decision was historic, granting not only the principle of such reservation, but the right of ETV interests to purchase microwave facilities from any source desired, not solely a common carrier. Later that year, SREB established a three-state network model involving seven institutions in Alabama, Florida and Georgia.

The CIC institutions reflect a long educational broadcasting tradition in radio as well as television stemming back to the early 1920's and before. The University of Wisconsin established the first radio station in the nation and constructed the first statewide educational radio network. The University of Iowa developed the first experimental educational television station in the 1930's. The first radio school of the air and the Institute for Education by Radio-Television, for many years the principal forum for non-commercial broadcasters, were established at Ohio State. Michigan State was a pioneer in utilizing closed-circuit television for undergraduate instruction and the University of Michigan in professional medical education. The University of Illinois provided headquarters for the National Association of Educational Broadcasters which later gave birth to the Joint Council on Educational Television. CIC at first studied radio network interconnection among members and later turned its attention to television.

The NCA, beginning in 1953 with the Subcommittee on Television of the Commission on Research and Service, through conferences, seminars, and publications has provided its 478 college and 3,628 secondary school members a constant flow of data on which ETV policy decisions could be made. With educational quality as its goal and accreditation as its major instrument, NCA efforts have been directed at individual institutions rather than groupings of institutions. Early ETV efforts took place at five of its member institutions---the University of Iowa as noted, a second experimental ETV station at Kansas State, and the first educationally-owned standard television station at Iowa State College, television courses for credit at Western Reserve and the University of Omaha. The Chicago City (television) Junior College began operation with NCA accreditation sanction.

WICHE membership, focussed on the Western states and the Pacific, with Alaska and Hawaii included in its 13-state membership, has had to deal with sometimes sparse populations scattered over wide distances. As an organization, WICHE has been less involved in ETV than its counterparts, although periodic reports on ETV development have been provided from the headquarters location at the University of Colorado. WICHE first held an area-wide conference on ETV in Seattle in 1962 which addressed itself primarily to formal instruction by television already well developed in a number of WICHE institutions.

2. Techniques

By 1967 the use of television for formal instruction and continuing education of all kinds had grown enormously in each of the regional complexes. ETV stations had multiplied in number, and in several instances, a licensee had added a second broadcast channel to meet increasing educational demands. While kinescope recording was still employed, videotape recording machines had come into wide use. The ETV installation without VTR capacity was an exception. Many stations had several such machines and a second generation of lower-priced recorders, helical scan machines, had come into being. In a number of cases the university television broadcast facility had in fact become a television production-recording-distribution center, feeding CCTV installations on the parent campus, to branch campuses, other institutions, and other stations, as well as its own broadcast transmitter.

Sharper distinctions were being made between "instructional television," viewed as a formal disciplinary application, and "educational television," a mixture of systematic and non-systematic continuing education with heavy cultural and public affairs content. In 1967 the Carnegie Commission on Educational Television, concerned with the long-time financing of ETV stations, redefined ETV as "public television." Increasing thought was being given to new developments under both designations. Institutions became mindful of more highly specialized applications of television involving institutional administrative procedures and instruction in professional and graduate schools. Some felt that a close relationship between television and the computer would evolve but the forms it might take remained obscure.

However, the original concepts of station activation and network interconnection---with some highly useful variations---were being pursued with vigor and success. SREB members now have 53 ETV stations on the air with an additional 25 presently planned. Seven states operate full or partially completed ETV networks with six additional systems planned. Florida has a unique two-way CCTV microwave network for graduate engineering education (the GENESYS TV system) which links the University of Florida campus to Daytona Beach, Orlando, the Merrit Island Launch Area at NASA, Cape Kennedy, Patrick Air Force Base, and Brevard Engineering College at Melbourne. The University of Texas serves as the base for TEMP (Texas Educational Microwave Project) providing a cooperative program of undergraduate instruction for 11 public and private institutions. The South Carolina Educational Television Commission operates a highly sophisticated production center which provides instructional services via a multi-channel CCTV system to public schools throughout the state and to three ETV broadcast transmitters as well.

In the CIC area, the Midwest Project for Airborne Television Instruction based at Purdue University was providing two-channel ETV service to substantial portions of a six-state area. Indiana University had established the National Center for School and College Television, an instructional film and tape library service. ETV stations on the air in the six states total 22, with one state ETV network in operation, and a multi-purpose microwave network to interconnect four state universities, their branches and related medical schools has just been approved by the Indiana legislature. Similar network plans are being completed for both undergraduate and professional education in Ohio and Illinois and are under study in Michigan. CCTV campus ITV systems may be found at each member institution.

Last year CIC, seeking new techniques of interconnection, served as the interstate model for the National Association of Educational Broadcasters for Phase III of the Educational Communication Systems study. Phase III was an inventory-appraisal of institutional wants and needs, both academic and administrative, which might be served by a broadband, multiple-purpose microwave interconnection system, linking CIC institutions and capable of carrying voice, video and computer signals.

In NCA member states (some of which duplicate the CIC area) the University of Nebraska, with NCA endorsement, established the Great Plains ITV Library to serve a 12-state area with recorded TV lessons. GPITL now provides service throughout the U.S. to junior colleges as well as secondary schools. Forty ETV stations are on the air and four state network systems. At least six major multiple channel CCTV systems for on-campus undergraduate instruction are in operation, with an undetermined number of smaller systems in medical schools and science laboratories.

WICHE reports all but three member states have ETV stations on the air, a total of 26. Two states have ETV network systems, and California has studied interconnection of all state institutions by a multiple purpose television microwave system. The Oregon System of Higher Education, with state institutions in Corvallis, Eugene, Monmouth and an Extension Branch in Portland, was the state model for the ECS Phase III study. Extensive use of CATV systems to extend ETV signals is taking place in the Northwest.

In each of these regions two other trends were becoming evident: (1) The increasing number of lower priced CCTV installations employing vidicon camera systems and helical scan tape recorders. Many of these developments reflected the initiative of an individual academic department rather than the thrust of the central campus television or audio-visual facility. (2) A much less marked but still apparent effort to foster cooperative production of subject matter. Although the exchange of full ITV course sequences from one campus to another is resisted, the exchange of materials is not. In the Oregon System of Higher Education the co-production of a course involving many people from different campuses is reported to increase its acceptance by the institutions concerned. The instant SREB project is a case in point.

3. Problems and Tentative Conclusions

Each of the regional organizations and particularly the SREB, the CIC, and WICHE, is committed by compact to study the area's problems and needs in higher education, to seek solutions through region-wide cooperation, to administer student exchange programs between states and institutions, to serve as a clearing-house and information center, and to provide consulting services to states and institutions on problems related to higher education.

Each of these objectives, it would seem, could be usefully advanced through further development and improvement of comprehensive, well-equipped, well-operated and well-financed electronic communications systems, the basic elements of which are already in being.

While the 1957 SREB interstate microwave proposal was never implemented as such, it was, without question, fundamental to a development of ETV stations and networks unequalled in the United States. Such networks now operate in Alabama, Florida, Georgia, North Carolina, Oklahoma, South Carolina and Texas, with additional systems scheduled for construction in Kentucky, Maryland, Mississippi, Tennessee, Virginia and West Virginia.

While these systems represent intrastate rather than interstate developments eventual linkage of all states into a common facility much like that originally envisioned could be accomplished with relative ease. The cost of such a 15-state facility and its operation is not large when compared with the annual capital expenditures and operating costs of any major campus or investment in a few miles of four-lane freeway.

Clearly, at this point in time, the notion of a television-only interconnection system is too limiting. The concept of the broad-band multiple purpose microwave or cable system which can transmit a variety of audio and video signals, serving the medical school, the computer center, the business office, the classroom, the laboratory, the ETV station and the local CCTV system, is rightfully gaining increasing attention.

While multipurpose interconnection is not a new concept, many administrators are treating it as novel and finding it useful. The "turnpike" potential of the multiple purpose system is just becoming apparent to those who had previously thought of separate "one-lane electronic roads" for radio, for telephone, for television, for computer. There is still confusion about television and related media. The computer is viewed with more mystique than it deserves, and use of the term "multiple media" or "cross media" has achieved something of the same aura.

In essence, the basic problems facing the regional agencies have not changed only availability of new techniques and technologies to help solve them. Education still is forced to play the "numbers" game -- growing student enrollments, a diminishing supply of qualified teachers, "tight money" for all requirements, and "tighter money" were conventional concepts of bricks, mortar and machines continue to be applied.

All of these elements must be viewed against the backdrop of the "knowledge explosion" and situations of information storage and retrieval with which the book and the index card can no longer deal. The new data processing and communications devices by themselves provide no miraculous solution. The educational task must be understood, the objectives made clear, and the methods clearly specified before the new devices are employed. Then---only then---can the promise of sharing educational resources on new levels of efficiency, speed, and economy be realized. Essentially these are the problems which led to the formation of the interinstitutional agencies. Their efforts to date provide some rewarding results.

The difficulties and impediments to further progress appear to have little to do with educational technology as such, but rest rather in the cultural lag and resistance to change which apparently affects educational institutions in our society more than it does its business or industrial elements. Innovation for the sake of innovation has recently become a preoccupation with some educational planners.

However, change to improve quality and to increase efficiency is another matter. The "farm to market" good roads arguments of another generation have special validity for institutions who contemplate cooperative programs of improvement. They reflect not only the opportunities but the difficulties which are encountered when "sharing" and "cooperation" achieve real meaning. Some aspects of the "ivory tower" and academic isolation must be sacrificed if real educational cooperation and sharing are to take place, just as land was lost to "right-of-way" procedures. Each individual and each institution must give up some measure of sovereignty and autonomy if the good of the entire educational establishment is to be insured. The willingness of the ETV professor to share his wares with other campuses but his reluctance to use their educational product in return is illustrative. The "patriotism" which persuades many a media practitioner to argue the merits of film versus television tape, or tape versus microwave distribution, rather than the job to be done and the particular medium to employ at a given time is another barrier. Finally, the whole business of cost and logistics presents a difficult problem for those who understandably try to relate new and apparently exorbitant media costs to old frames of reference. The logistics of the new educational "mix" are difficult to understand or employ. And most frames of reference, institutional or legislative, are local. Unless its advocate can explain and justify the "new vision" in local terms, it will tend to remain a private vision.

SREB can justly be proud that its perspective in these matters has become not only regional, but national, and more importantly, the supporters at home in large part share this point of view.

William G. Harley
Richard B. Hull

C. CRITICAL JUNCTURES IN THE PROCESS

1. Generating the will and means to cooperate

   Initial barriers to cooperation: psychological, administrative, political, and financial. Suggestion of strategies for circumventing them.

2. Identifying needs and opportunities

   Selection of the right challenges is essential to project success. Some of the likely options: projects in which all participants are highly conscious of their inability to do anything without cooperation; projects in which one participant has great acknowledged superiority. Contrast these with projects in which participants are rivals for dominance, or in which none can afford to admit that he is not self-sufficient.

3. Defining precise objectives

   Many projects fail because no one really compelled the parties to establish specific learning objectives in advance. A series of rhetorical hopes is no substitute for precise and achievable purposes.

4. Prescribing the elements in the teaching-learning system

   It is important to establish in advance what the roles of the various contributors are to be, and precisely where the responsibility rests for the solution of each of the various problems identified. It is also important to design the whole system, not just the television component.

5. Identifying the measures necessary for maintaining consensus throughout the term of the project

   Testing, review, and evaluation must be done as the project proceeds, (a) to make sure that parties are given an opportunity and mandate to reaffirm their endorsement periodically, and (b) to insure that initial hypotheses are subjected to continuing reappraisal and correction.

6. Agreeing on the process for changes

   Agreement must be established on the process by which necesary changes in the plan are to be made once the project is under way, and as a corollary, procedures must be agreed upon for updating and revising program elements after initial use.

7. Maintaining and strengthening the "will to use"

   Attention should be called to various strategies for getting and holding enthusiastic support of those whose "use-don't use" decisions will spell success or failure for the system.

8. Supporting the system

Certain non-broadcast activities and elements need attention if the necessary materials themselves are to produce the yield of which they are capable.

9. Looking ahead

It is desirable to take a long-range view of interinstitutional cooperation, which is an evolutionary process. Optimum results for a team effort are not likely the first time around; but a disappointing first effort is no failure if it leads to a second or third or fourth effort which capitalizes on the experience gained.

Donley Feddersen
Richard I. Evans

D. GUIDELINES FOR INTERINSTITUTIONAL EXCHANGE AND USE OF MATERIALS

1. Proper Expectations as to Yield

It is recognized that projected uses of television (and related media) may rely upon any one or all of its known capabilities. In some situations, television is important only as a means of transmission; in others the ability to store video images for later dissemination or reference is the major reason for its use.

In its sophisticated forms, television possesses the potential for being the central component of a learning system. Clearly, with features such as quickediting, time sequence variation, animation, and close viewing, television can provide unique educational experiences for students.

2. Technical Standards

In evaluating tape, kinephoto or transmission systems, guidelines established by NET and NCSCT are considered appropriate. Consideration must be given to the availability and compatibility of equipment at the participating institutions.

3. Production Consideration

A major production effort, i.e., a series of television programs, involves a significant financial commitment and includes interrelation with other media. A well organized plan or design is required embracing considerably more than a manipulation of cameras, lights, and talent.

The assembly of production elements must be congruent with the nature of course content, the educational goals sought, and the context in which television materials are to be used, Major decisions regarding the creation and execution of a production design should be made by a full-time production team. Team members should include individuals especially qualified in:

- (a) Presentation
- (b) Content
- (c) Research
- (d) Communication-(TV Production)
- (e) TV Direction
- (f) Utilization

4. Evaluation, Research and Feedback

A faculty committee should be given the responsibility for conducting a continuous evaluation during both production and use phases of television material. Interinstitutional organization for use of TV materials should include mechanisms for constant research on educational effectiveness of the media and interpretation of feedback from students, faculty and the production team.

5. Revision

In order to insure that the value of any TV production be appreciated and preserved, provisions for expeditious and periodic revision must be incorporated in the basic design. For this reason, the flexibility to revise content, presentation and use should be viewed as a necessary and natural response function within the basic design.

6. Utilization Aids

Maximum use should be made of all instructional aids with particular attention to those which are used to best advantage in TV. The capability to provide sound educational experiences such as close or microscopic examination and attention focusing that are outside the range of other media should be emphasized wherever TV is being considered for use. Effective training of user groups through involvement in research, production and review is necessary to insure maximum and proper utilization. Such innovative concepts as presentation through or in the absence of personalities of eminence, use of animation, time sequencing of material, should also be carefully considered in each basic design regardless of past practices.

Robert B. Gaither
Hugh Greene

E. A LOOK AHEAD

Projecting present developments in education and technology into the future, one might attempt to describe certain evolutionary changes.

1. The use of audio-visual information in education will be greatly facilitated by electronic technology and, hence, will significantly enhance the efficiency of the teaching-learning process.

2. Information storage and retrieval will evolve to a point of sophistication where there will be reservoirs of information readily available to anyone anywhere. This system will depend primarily on electronic audio-visual technology, consisting of economical distribution modes and individualized read-out or display devices.

3. We can expect key breakthroughs in television distribution via satellite and other devices.

4. Television will play a key role in transmitting certain kinds of computer-assisted education.

5. The electronic firm-publishing house merger of today may indicate that the most sophisticated kinds of electronic audio-visual production will fall to these extra-academic agencies. It may prove impractical for all academic institutions to develop high level production capabilities. However, the education of academic communication specialists to be employed by the "production houses" will be the responsibility of academic institutions. In addition, whereas these "houses" will have the production capabilities, they still will depend on the academician for the talent and the vital link to the consumer. Just as most institutions have printed material production capability, they will also maintain audio-visual production capability at a limited level.

6. Institutions of learning will share resources to a greater extent than ever. It is possible university systems will evolve on a regional and even national level.

7. The need for continuing education will increase to a point where more education will have to be brought to people rather than people to education. Television will play a key role as a vehicle.

8. Our responsibility to aid education in developing countries will grow and we will employ "great-leap" methods involving electronic technology.

9. An international community of scholars will emerge aided by new, more feasible modes of communication.

It appears that in addition to its immediate goals, the present SREB project is of significant value to the future for two basic reasons:

1. It will assist universities to develop expertise in the production and utilization of electronic audio-visual teaching material.

2. It will help develop patterns for more effective inter-institutional cooperation.

John Meaney
Michael Romano

APPENDIX IV

EVALUATION PANEL REPORT

A. ADMINISTRATIVE STUDY

That the administrative study conducted as a part of the Southern Regional Education Board's Educational Television Project was, at least in part, successful is evidenced by the fact that the Board voted to ask the member states to support a cooperative instructional production project with si able state funds.

It remains to be seen, of course, to what extent the states will in fact make such funding available--but at least the project convinced the administrator-members of the Board of the need and practicality of an interinstitutional production program.

The process followed in the administrative study is adequately described in the final report of the project, and there seems to be no need for further description here. Lists of institutions visited and individuals interviewed have been available to the panel and are in the files of the Board. Reports of each visit are also available.

The conduct of this study, it seems to the panel, was logically one of personal visitation and interview at institutions which might participate in a regional production program. In most cases interviews were held with chief administrative officers as well as with other faculty members.

SREB, because of its good relationships with institutions in the region, and its long history of interest in educational television (see Media Standards Subcommittee Report on "Experiences with Interinstitutional Cooperation," Appendix III), was uniquely equipped to conduct this study.

The panel commends Dr. Kenneth Christiansen and Mr. Robert Schenkkan, who did most of the visitations, for their work and the results which it encouraged.

As the project draws to a close, two states have made financial commitments to the production program, and two have taken negative action. The other eleven have not acted, most of them not having had legislative sessions since the Board's recommendation was made. Of the two which took negative action, one could probably have been expected to do so; no projection of acceptance of the proposed program is possible at this time.

Robert C. Anderson

B. CONTENT PLANNING

As described in Appendix I, in conducting content planning activities the project staff was concerned centrally with the stimulation of effective approaches to curriculum construction.

Ideally, evaluation of content planning should be undertaken as instructional materials are produced and employed. Then various steps in the process used to develop them can be assessed in relation to their acceptability and effectiveness. Because the interinstitutional project did not encompass completed production (except for pilot lessions) and actual use of television presentations, it is not possible to evaluate in this manner.

Consequently this evaluation report is regarded as tentative and incomplete. It considers the adequacy of the basic approach taken to content planning, administrative arrangements made for its conduct, and existing results.

Generally the project employed an empirical approach to content planning. That is, the organization and presentation of ideas was considered tentative until tested with students and faculty via pilot productions. This procedure was employed in five of the seven content areas. In the remaining cases the planning approach was subjective. The adequacy of planning was determined by judgments of content planners or informal audience reaction. Based on the most respected current thinking about the development of instructional materials, the project's empirical emphasis is to be commended and the intuitive approach avoided.

Further, the process employed in developing effective learning materials is regarded as embracing several interacting steps. Content planning is conceived as a prelude to provisional production and validation. Subsequently, feedback from students and teachers will modify content and result in revised production. While this occurred in many of the content planning areas, the project itself was so designed that production ended before student and teacher response could make its full impact upon content planning. Accordingly, it would appear sensible to regard the series outlines produced by the various content committees as "subject to further refinement".

In addition to consideration of the project's approach to content planning, attention should be given to the administrative arrangements surrounding such planning. In its activities, project staff was concerned with seven factors.

The first was the number of institutions to be involved in planning. In the project, the number of institutions represented on each committee ranged from three to nine with the typical group containing eight. Measured by their output of series outlines, lesson plans, and pilot tapes, the four-member mental health group appeared somewhat more productive than the larger committees. On the other hand, there is no way of knowing presently whether there is a relationship between the number of institutions involved in planning and the number of institutions that ultimately will use the completed television series. More importantly, it is not possible to relate the breadth of the institutional planning base to the actual instructional effectiveness of produced learning materials.

The second administrative consideration was the number of members comprising each committee. With one exception, the size of committees was equal to the number of institutions represented. Presumably this provided a manageable group sufficiently large to reflect a full range of views and yet not so large as to be cumbersome in discussion and coordination of written assignments. As in the case of the number of institutions described above, it is premature to conclude that committees of a certain size have greater value than committees of other sizes.

The factor of committee selection, or who serves on committees, appears more crucial to success than considerations of number. The technique of seeking nominations from deans and department heads was fruitful. However, it did not go far enough in insuring the availability on each report, a possible improvement would be to receive more recommendations than ultimate members so that staff could make choices based on additional information and experience with nominees. This approach should be underscored, as the final product of planning will in large measure be determined by the planners. Choosing them carefully is a major responsibility of the central staff. While it is appropriate and necessary for staff to seek advice, operational effectiveness demands that staff retain authority over the appointment of committee members commensurate with their responsibility.

Three additional administrative factors dealt with committee organization, number of meetings, and methods of work. As reported by staff, no unusual developments occurred. Predictably, the time required for effective planning surpassed original estimates. It appeared also that the work load generated by some groups could not be handled through occasional meetings but required consecutive activity. Since the time needed to plan content adequately is almost always underestimated, it seems useful to allow for more realistic allocations of human resources in the future.

The final administrative matter cited in the staff report was orienting committee members to television. Because television is not used widely in higher education it was felt that content planners should become familiar with the general operation and capabilities of television. Accordingly, several days were devoted to this activity by most of the committees. Orientation was most probably useful insofar as it suggested instructional roles for television and revealed existing productions in content areas of concern to the planners. When orientation covered aspects of studio production, however, it probably diverted attention from the central curriculum planning role of the committees. Stated another way, there is always a danger that content planners will become overly fascinated by television's production processes and unknowingly warp instructional concerns to fit television. Considering the complexity of instruction and the limits of their professional competence, it is enough for content planners to deal with curriculum matters and leave the television side to television specialists. For this reason, personnel developing instructional materials should be organized as a team composed of both content and television experts.

The final aspect of the project's content planning activities to be evaluated is the tangible products or results. These results included pilot productions, series outlines, lesson plans and a proposal for a videotape classification and exchange project. As a rule, pilot productions were rated as to "general effectiveness" by students and faculty. Reaction to the pilots was functionally useful as it resulted in revised content formulations. In the psychiatry area, the rejection of new television production and the design of a project to classify and make available existing recordings represented a thoughtful projection of how television might be applied in psychiatric instruction.

In summary, the project demonstrated that content planning could proceed on an interinstitutional base. Because of the project's nature, however, it cannot presently be known whether or not such planning will contribute to the greater acceptability and instructional effectiveness of completed learning materials.

Edwin G. Cohen

C. MEDIA STANDARDS

Any attempt to set standards should first of all define the kinds of standards which are its goal. Our American scene has been characterized generally by two kinds of standards: those that grow up more or less spontaneously and voluntarily from the grass roots and those that are ultimately fixed and imposed from above, as by legislation. The Radio Code of Good Practices which has been evolved by the National Association of Broadcasters is an example of the former, and the Pure Food and Drug Act is an example of the latter. It should also be noted that our American tradition is heavily in favor of self-regulation wherever this is possible. Compulsory standards and regulations imposed by legislation are generally regarded as a last resort to be adopted only after the authorities concerned have had ample opportunity to effect self-regulation and have clearly failed to do so until our common good requires action.

The kinds of standards, then, which have been the goal of this project are clearly of the voluntary and cooperative type to be set by the free and democratic processes of association between representatives of participating states and institutions. The members of the Media Standards Committee have frequently during their deliberations reminded themselves that their standards are to be "descriptive rather than prescriptive." Some of the members have even felt that because of the possibly compulsory connotation in the word "standards" they should substitute the word "guidelines" in their formulations.

The inter-state nature of the project may well signal immediate and peculiar difficulties in this type of standard-setting: the inter-state communication base is far more tenuous and unwieldy than the processes of getting people together within states; the processes of finance and control are also well established intra-state but are often relegated to a low position on the totem pole of priority when they require some cooperative sharing across state lines.

We should also note that another formidable difficulty in this type of standard-setting arises from the shadow of shelf hardware. The job to be done should ideally condition the development of the tools to be used in it. In education, however, we find a field that is, in some respects, lagging behind other areas in our technological society. The fact is that an immense amount of equipment designed for essentially non-educational jobs already exists and is cheaply available. The difficulty, therefore, is for education to get on top of the equipment situation so that it may specify and set standards for the equipment that it needs rather than having the accidental availability of equipment condition the uses that education makes of it.

We must also anticipate that an inter-state, regional setting of standards would assume that other sets of standards would be similarly set in other regions, that there would eventually be some competition between sets of standards, and that each set of standards would aim at truly national quality. The assumptions here would be: (1) that the efficiency of regional production could be multiplied many times if there were a good exchange potential with other regions, and (2) that the American public would be best served by having a multiplicity of choice, both among standards and among the materials produced under those standards.

Granted this kind of standard-setting as the project goal, therefore, and noting these difficulties to be anticipated, what would be the proper way to set such standards? Obviously, a fifteen-state region would need to involve at some time or times a great many of the institutions of higher learning in the region, preferably all or most of the leading institutions. There should also be an openness, by consultation if not committee membership, to national organizations and authorities, both scholarly and media-oriented. The process would never end: a series of meetings might produce draft standards, but these would require ratification, and the materials produced under them would require field testing and operational evaluation, pointing up further refinements of standards and calling for new meetings, etc. Such a process must be a continuing and evolving one, certainly spread over many years. It would involve an on-going program of developmental research on the feasibility, the validity, and the process of standard setting itself, insuring adequate flexibility of standards and provisions for changing with the times, reviewing the current set and encouraging the input of new thought through a nomination procedure. Perhaps the most important standard of all would relate to the direction of thought flow in the entire project, making sure that the stimulus for change originates in a continuing reevaluation of academic goals and then proceeds, in view of these, to a choice of the media required to serve them. In other words, media standards are not to become media salesmen but rather, academic servants.

Another facet of this kind of standard-setting is the fact that ultimately the standards will have to live or die in a given market situation. The standards will have to eventuate in products that will meet a felt need with economic efficiency, competing upward in quality and downward in price. Otherwise the standards will disappear from the scene and become inoperative, along with their products.

Finally, a full-blown standard-setting process cannot neglect people and their training. Tomorrow's standards are being very importantly preconditioned by the training that is being given today to the future operators. Therefore, a mature standard-setting process may be expected to have continuing concern for the kinds of standards that are being built into the people who are preparing for entry into the field--not only their standards but even their attitudes toward standards.

Now to what extent does it appear that the present project has succeeded in this very large task of setting media standards? First, it is clear that the project did not provide either time or money to do the full job. Next, the fact that the project did not include full-scale production and distribution phases means that the media standards committee had to work *in vacuo*, so to speak, without field testing and feed-back data that would be essential to really operative standards. Faced with the inadequacy of two meetings and their related correspondence, the committee wisely decided to delimit its agenda and eliminate from all but the briefest mention such complicated and demanding questions as technical standards. The scope of this problem alone may be seen from the *Standards of Television Transmission* published by the National Association of Educational Broadcasters. The choice of the committee, then, has necessarily been not an evolving process but a static overview or outline of the problems and steps toward media standards, emphasizing some areas more than others, as time, budget, and the backgrounds of committee members seemed to make possible.

There has been no real opportunity for developmental research, or marketing experience, or personnel training steps. The committee was far too small to undertake a real job of standard-setting for a fifteen-state region. Nevertheless, the composition of the group went as far as funds would permit in meeting the true requirements: Both national associations and universities of the region were included. The ideal committee, however, would have been many times larger, including representatives from many more of the colleges and universities in the region.

Within these structural and operational limitations, the media standards committee of this project has performed a very useful test run on the problem of standard-setting in an inter-state situation.

Richard B. Hull
John W. Meaney

D. AN EDUCATIONAL MEDIA PRODUCTION SYSTEM FOR THE SOUTHERN REGION

The purpose of this paper is to outline preliminary thinking, concepts and descriptions of a *Production System for Educational Media* in the Southern Region of the United States.

The System is so conceived as to have integral types of needed but limited facilities that can be tested, duplicated and arranged in varied patterns and in different areas throughout the Southern Region. The purposes of the coordinated complex of a center and cooperative modules will be to produce those amounts and kinds of educational and instructional materials that are needed, and not otherwise available, in the colleges, universities, and professional schools of the Region.

The media to be processed by the System will be those that are required in defined content areas to compose and arrange educational television courses, curriculums and units of instruction.

The System will serve principally as a flexible base of support for creative educational production; it will not be used importantly for broadcasting and distributing the instructional materials and programs directly to situations of use; it will distribute to educational broadcast facilities and institutions.

The interinstitutional and cooperative Production System will supplement the media production facilities that already exist in the professional schools, colleges and universities of the South. The production modules of the System will be supplementary in another sense: They will provide optimized places and designed spaces where teams of educators may work closely with commercial interests in cooperative endeavors to provide those instructional materials that are needed by the participating educational institutions and agencies.

The Production Modules will be designed, housed, equipped and staffed for producing instructional programs using a wide variety of media. Television is a very general and broad channel recording and broadcasting system of equipment and operations; hence, multi-media productions are required to develop multi-media educational programs for using the full potential of the television medium. Furthermore, the appropriate use of a broad spectrum of media and modes of communication is usually required to achieve the desired high quality and effectiveness of the instructional materials.

The Production Modules will be designed, established, developed, and coordinated with existing activities and operations of the educational institutions which are located within the states served by the Southern Regional Education Board. Clusters of modules of the System may serve all of the participating institutions. Also, one cluster of modules may serve the full range of media production needs of a professional group or content area. The modules are to be so structured and planned as to be arrangeable in a variety of flexible configurations.

The Feasibility Study and the Cooperative Educational Television Project have demonstrated that interinstitutional cooperation is developed most effectively across institutional boundaries by individuals and groups which have common professional educational interests. Some professional groups cooperate better than others, but almost all common interest groups cooperate better than groups which lack a common interest in an area of work or an instructional field.

The Media Production Modules of the System shall be designed and built, staffed and operated in close concordance with the following conditions:

1. The important and defined needs for instructional materials.
2. The needs for media production facilities that supplement those that meet acceptable standards and that are already available in the member institutions.
3. The real potentials for the uses of instructional media and materials in institutions of higher education in the South, including community and junior colleges and professional schools.

(The potentials may be those that are demonstrable whether or not they are known or realized by faculty members.)

4. The economic and educational feasibility factors.

The Media Production Modules that are to be designed will strategically be located at universities of the Southern Region, or in neutral territories like research parks that are shared by several universities. Criteria will be developed and used in selecting the locations for the main Coordinating Center of the System and the functional Media Production Modules. The main Coordinating Center might well be located where substantial groups of media specialists are already engaged in producing educational materials. The special Media Production Modules may be duplicated in the same or different locations and the number may be increased or decreased depending on present and changing needs and requirements.

The planned and coordinated System of Instructional Media Productions with a Coordinating Center and Modules should be dispersed throughout the Region. It has the following advantages:

1. The plan capitalizes on available competencies, interests, and facilities of the universities and other agencies of the Region.

2. The plan provides for dispersed responsibility for special kinds of production requirements but maintains an optimum of centralized control and coordination over those functions that can best be served centrally.

3. Broad but responsible participation and coordination will strengthen the interests and motivation of cooperating media specialists and reduce or entirely eliminate negative attitudes of area "infringement" and personal "displacement".

4. Dispersion of production responsibilities and the provisions for participation by users, or representatives of users, in production efforts will increase the acceptability of finished instructional materials.

5. The coordinated network of production skills and facilities provides a plan which is adaptable for growth or contraction and for changes of both sizes and functions.

6. The center-network conception provides ready access to some facilities and services by content specialists, and the plan may effectively organize and use the needed resources of the Region.

7. It is estimated that the center-modular-network plan will be more economical in relation to production costs than a single production center; however, administrative, travel and communication costs may be higher than for a comprehensive center.

8. The coordinated center-modular-network plan is congruent with the administrative philosophy of the Southern Regional Education Board.

The next stage of thinking is about the design characteristics of the coordinating and administrative center, and about the several types of Media Production Modules.

The following functions may be served by the coordinating center of the System:

1. Making assessment of needs for and the potentialities of educational-instructional media of the Region in the area of higher education.

2. Conducting systematic planning of the logistics, strategies, and tactics for the procurement, production and distribution of instructional materials for the colleges, universities, and professional schools of the Southern Region.

3. Formulating criteria for use in selecting and designating the institutions that will operate the network of cooperating media production modules.

4. Planning and developing the original set of media production modules, developing formal agreements on responsibilities for conducting training and orientation programs for the personnel of MPMs and content specialists.

5. Providing interinstitutional liaison, and also liaison with other educational agencies and organizations, and with special educational and media oriented offices of the Federal and State Government.

6. Providing liaison with commercial interests that are cooperating in the production and distribution of instructional media materials.

7. Providing basic producing, processing and duplicating services as required, when these services are not otherwise available or when centralization of these services is advantageous and more economical than other alternatives.

8. Providing a "search, secure and provide" service for original and high quality source materials which (a) are requested and (b) have high probability of being useful in the production of educational and instructional media.

9. Providing translation, transformation and recording services for transferring instructional materials from one medium to another, from one to several media, or from several to one medium in order to meet and improve conditions of use.

10. Establishing patterns of models of Media Production Modules when and if such a configuration of facilities, equipment and people becomes, in the future, necessary and desirable.

11. Establishing and maintaining cooperative working relations and agreements with National Educational Television and the National Center for School and College Television, and their constituents

in the Southern Region, and cooperating with the Regional Education Laboratories, Educational Research and Development Centers, and Supplemental Educational Centers.

12. Managing the business and finances of the Coordinating Center and the Media Production Modules--; to develop project and program concepts, prepare proposals, and administer grants and contracts, receive and reinvest earnings and income.

The Coordinating Center may also provide mobile units for support of its own field work and for rendering assistance to the Media Production Modules. The Center should provide entirely adequate assessments and evaluations of instructional materials whether these are produced by the Coordinating Center or by any of the Media Production Modules, or are secured from other sources. Furthermore, the Coordinating Center may be responsibile for the distribution, sales, and rentals of the instructional materials that are produced. Finally, the Coordinating Center could provide space and facilities for groups of professional content people who will need to work together for periods of months on special production projects and programs.

The Media Production Modules, either tightly clustered or dispersed, will serve the following production functions:

1.0 MEDIA PRODUCTION MODULES

- 1.1 Still Photography
- 1.2 Motion Picture Photography
- 1.3 Sound-Commentary-Tape Recording
- 1.4 Videotape-Picture Sound Recording
- 1.5 Charts, Graphs, and Drafting
- 1.6 Model, Scaled Structures, and Simulation

2.0 CONTENT PRODUCTION LABORATORIES

- 2.1 Physics
- 2.2 Chemistry
- 2.3 Biology
- 2.4 Behavioral Sciences
- 2.5 Professional School Modules
    - 2.6.1 Architecture
    - 2.6.2 Medicine/Health Professions
    - 2.6.3 Business
    - 2.6.4 Education-Teacher Training

The design characteristics of the Media Production Modules may be determined, as a first approximation, by the services to be provided, i.e., photography, graphics, videotape: picture-sound combinations, etc. However, there is another possibility; the main design characteristics of the MPMs could be determined first by the requirements of content fields such as physics, biology or the arts and humanities. In this latter case the several media needed for productions will be provided for in the content laboratory. The examples of this latter arrangement are those of The American Institute of Biological Sciences, The University of Colorado at Boulder and The Educational Services Incorporated at Cambridge, Massachusetts.

In reality the MPMs need not be pure types; one type could reflect the requirements of a multi-media production operation while the other type could reflect the requirements of limited academic areas. There could be, in addition, mixed types of production modules.

Another line of variations could be that of the permanence or impermanence or life span of MPMs; some could be permanently established while others could be planned on a temporary basis and be ad hoc to a particular project.

During appropriate stages of systematic planning and during periods of development of the Coordinating Center and Network of MPMs, the requirements in terms of numbers and kinds, locations and sizes could be established

To plan and develop the center-module-network concept of a regional production system will require the collection of information and data on many important questions such as the following:

1. What are the areas of critical needs for instructional programs and materials?

2. How shall decisions be made about orders of priority of needs and related productions?

3. What resources are available in the field of educational technology which can and should be used in the production of new high quality instructional and educational materials?

4. What are the number of people and kinds of professional competencies available, and on what conditions, for staffing a Southern Cooperative Program of Educational Productions?

5. Where are the facilities and people located?

6. How can MATCH be improved between facilities and competent people?

7. What are the training needs for new people, and are the present graduate training capacities of universities being used effectively?

8. What are the needs for retraining and development programs for faculties and for media specialists, and how are these needs to be met?

9. What will be the funding and equipment requirements of the program as it is begun, is developed, and becomes of adequate size?

10. What will be the financial requirements for launching, building, and sustaining the program?

11. What can be a reasonable level of federal, state and local support?

12. How can returns from productions be managed and re-invested in successive and increased productions?

13. How will the problems of copyrights be solved?

These and other questions need answering.

The thinking about possibilities of a Coordinating Center and Network of Media Production Modules for the South raises a final pertinent and important question: Assuming the desirability of the proposal here made in outline, what bearing have the results of the Project on "---Inter-institutional Uses of Television and Related Media" on the questions of the validity and feasibility of the proposed Center and Production Module Network?

C. R. Carpenter